



The University of Western Australia

School of Psychological Science

presents

UWA
Psychology
Honours Conference
2018

September 25th, 2018



THE UNIVERSITY OF
WESTERN
AUSTRALIA

UWA Psychology Honours Conference 2018: Speaker Schedule

Time	Bayliss G33	Wilsmore LT	Tattersall LT
8:30 AM	Coffee on arrival (Bayliss Foyer)		
8:45 AM	Opening Ceremony (Bayliss Foyer)		
	Cognition	Perception	Clinical Psychology
9:00 AM	Shaun Dalmasson	Isabella Le Roux	Kelly Cusworth
9:15 AM	Jessica Rowsell	Sarah Maisey	Kenneth Sim
9:30 AM	Emma Vincan	Cody Witham	Dylan Desai-Rogers
9:45 AM	Cassandra Mircev	Zoe Akindele-Obe	Hannah Cruise
10:00 AM	Matthew Walczak	Bronte Donatti-Liddelow	Sienna Zimpel
10:15 AM	Erin Roznoczny	Jessamy Burton	Christian Long
10:30 Am	Amelia Reynolds	Saba Siddique	Joanna Tedeschi
10:45 AM	Morning tea		
11:00 AM			
	Cognition, Developmental & I/O	Neuropsychology & Perception	Clinical Psychology
11:15 Am	Alex Wheeler	Brooke Peden	Chiara Ventris
11:30 AM	Alicia Teo	Yu Lyn Ng	Phoebe Carrington-Jones
11:45 AM	Ignacio Alarcon	Sarah Stanton	William Hoffmann
12:00 PM	Joan Chan	Francesca Buhagiar	Tahlia Sanders
12:15 PM	Grace Steedman	Danielle Fynn	Georgia Turnbull
12:30 PM	Micah Grishina		Rebecca Shao
12:45 PM	Lunch (Bayliss Foyer)		
1:00 PM	Honours Information Session (Wilsmore LT)		
1:30 PM			
	I/O Psychology	Neuro & Social Psychology	Clinical Psychology
1:45 PM	Jack Dowling	Mikayla Conlan	Hannah West
2:00 PM	Jasmine Siew	Alex Berry	Shannon Kelly
2:15 PM	Natalie Griffiths	Julia Haile	Michelle Lopez
2:30 PM	Jacqueline Lim	Micah Tan	Hayley Jackson
2:45 PM	Katherine Nguyen	Yiing Tan	Bernadette Hodgins
3:00 PM		Kathryn Somerville	Pamela Bethell
3:15 PM	Afternoon Tea (Bayliss Foyer)		
3:30 PM			
3:45 PM	Keynote Presentation (Wilsmore LT)		
4:00 PM			
4:15 PM	Best Presentation Award and Closing Address (Wilsmore LT)		

G.33 Bayliss is at the Northern entrance of the Bayliss Building,
 Wilsmore Lecture Theatre (LT) is adjacent the Bayliss Building, on the left.
 Tattersall Lecture Theatre (LT) is adjacent to the Bayliss Building, on the right.

Bold names indicate session chairs.

Simulating the future: The role of situational mental imagery in knowing what to want & how to get there

Keynote Address: 3:45-4:15 PM

Presented by: Julie Ji, Ph.D. (Cantab)

Inaugural Forrest Postdoctoral Research Fellow
School of Psychological Science
University of Western Australia



Abstract:

The capacity to simulate hypothetical experiences in the future, via *situational mental imagery*, helps us to “try out” the likely reward or punishment value of such events. This information is used to guide our judgment and decision-making about whether an experience/outcome is desirable or undesirable, and therefore whether we should try to approach it, or avoid it, respectively. This talk will consider the role of *situational mental imagery* in making judgments and decisions about one’s career, drawing on the speaker’s research and personal experiences as a management consultant, a communications officer for an UN agency, and a psychological scientist.

Speaker Bio:

I started my research career at UWA in 2012, as an Honours student working with Prof Colin MacLeod and Dr Ben Grafton in the Centre for the Advancement of Research on Emotion (CARE). For my PhD, I wanted to combine my work on depression-linked cognitive biases with my fascination with our capacity to re-experience the past and pre-experience the future via mental imagery. This led to a Cambridge-Australia Poynton Scholarship to complete my PhD on “Emotional Mental Imagery: Investigating Dysphoria-linked Bias” at the Medical Research Council Cognition & Brain Sciences Unit, University of Cambridge, under the supervision of Professor Emily Holmes (now Karolinska Institutet, Sweden), Dr Fionnuala Murphy (Cambridge), and Professor Colin MacLeod (UWA). After completing my PhD, I worked with Professor Bethany Teachman at the University of Virginia in Charlottesville, USA, as her postdoctoral research associate, investigating how situational mental imagery can facilitate cognitive bias modification treatments for anxiety. Returning to UWA in March 2018 as an inaugural Forrest Postdoctoral Fellow, I am investigating how information processing biases contribute to approach and avoidance behaviour, and how situational mental imagery modulates the motivation to do so in the context of mood and anxiety disorders. Ultimately, my goal in conducting this basic experimental research in the lab is to drive treatment innovation and enhance treatment delivery within, and outside, the clinic.

UWA Honours Conference 2018: Presentation Titles and Abstracts

9:00-9:15 AM

Bayliss G33

Effects of sensationalised reporting on public trust in science
Shaun Dalmasson – Ullrich Ecker

Sensationalised science reporting is common in the mainstream media. The nature of this reporting, and subsequent refutations of sensationalised claims, may negatively affect public trust in science. Currently, research has investigated the effects of media reporting and differing media platforms on public trust in science. However, research on the effects of sensationalised science reporting, and subsequent refutations on trust in science, is limited. In this study, participants were randomly assigned to a condition containing the following news articles: general news, non-sensationalised science, sensationalised science, or sensationalised science with refutations. We hypothesised that: (1) refutations would reduce belief in sensationalised claims; (2) sensationalised reporting would reduce trust in science, with and without a refutation, when compared to control and comparison groups; and (3) trust in science would differ based on whether sensationalised reporting was refuted. We found refuting sensationalised reporting reduced trust in science, relative to non-sensationalised science reporting.

Wilsmore LT

How automatic are facial first impressions?
Isabella La Roux – Clare Sutherland, Nichola Burton, Gillian Rhodes

Humans rapidly evaluate strangers based on facial first impressions. Current literature has disputed whether first impressions occur effortlessly. Using a novel cueing paradigm, this study explores the automaticity of facial first impressions (trustworthiness, dominance and attractiveness), in particular how effortlessly impressions are formed. In order to distinguish automatic from controlled processing, performance was compared when instructions were given at the beginning (pre-cueing) or end (post-cueing) of a trial, as well as by examining the effect of cognitive load. Results found no evidence that the manipulation of cueing or load significantly altered or impaired impression agreement levels. However, there were significant differences in reaction times, with impressions made in the pre-cueing condition on average faster than the post-cueing condition. Overall this study supported the notion that first impressions occur effortlessly, although there was indication to suggest degrees of effortlessness and evidence that different trait impressions may have different time thresholds.

Tattersall LT

Is disruptive worry characterised by a misalignment between attentional bias to
threat and danger controllability?
Kelly Cusworth – Lies Notebaert

Everybody worries, and sometimes it is beneficial to do so. However, for some people, their worries can be extremely debilitating. Previous research has found high worriers have a higher attentional bias toward threat (ABTT) than low worriers, but little is known about when pervasive worry becomes disruptive to daily functioning. Using a novel adaptation of an ABTT task, this study aimed to determine whether the ability to control a danger is what differentiates those worriers who experience disruption, and those who do not. It was predicted that worriers with low disruption would only attend to controllable dangers, but worriers with high disruption would attend to all dangers regardless of controllability. Interestingly, neither measures of worry nor disruption were predictors of a participant's ability to align their attention with the controllability of danger. Relevant explanations, implications and future directions are explored.

9:15-9:30 AM

Bayliss G33

Reducing beliefs in misconceptions
Jessica Rowsell – Ullrich Ecker

Misinformation is information which is presented as factual and later found to be invalid. This invalid information often continues to influence reasoning despite refutation; this is known as the continued influence effect. Refutations are statements denying the factuality of information. Research efforts have focussed on making refutations more effective; however, even well-designed refutations often fail to eliminate the continued influence of misinformation completely. In the behaviour change literature, one successful approach has involved social norming. The present study investigated whether social norms can lead to belief change and thus help refute invalid information. Results demonstrated that the combination of a refutation and social norm were more effective in influencing belief change than refutation or social norming alone.

Wilsmore LT

Let's face it: The role of expression in perceptions of trustworthiness and dominance
Sarah Maisey – Linda Jeffery & Gillian Rhodes

Humans rapidly evaluate faces along the dimensions of trustworthiness and dominance. Evaluations of trustworthiness and dominance are suggested to arise from an overgeneralisation of facial cues that resemble specific emotions. The current study aims to extend previous findings that suggest a common neural system is engaged to process emotion and facial trustworthiness, by using anti-expressions and including a measure of dominance. Anti-expressions (i.e. anti-happy) are faces with visual characteristics opposite of their target expression (i.e. happy) and when used as an adapter, bias perception toward the target expression. A neutral face manipulated to look happy, was evaluated as more trustworthy and more dominant. A neutral face manipulated to look angry, was evaluated as less trustworthy and more dominant. Results provide converging evidence for a common neural system underlying emotion perception and the evaluation of facial trustworthiness and dominance. Implications and future directions will be discussed.

Tattersall LT

Remembering pleasure: The effect of recalled effort and reward in influencing engagement of hedonic experience
Kenneth Sim – Julie Ji & Lies Notebaert

Anhedonia is characterised by one's reduced interest in or experience of engagement in most activity, including previously enjoyable activity. This reduction of engagement is problematic as it can exacerbate other negative symptoms of depression, however, the cognitive mechanisms underlying anhedonia remain poorly understood. Current methodologies highlight the role of reward (enjoyment) in influencing individuals' engagement behaviours, but fail to also account for the effort required prior to such engagements. It is also currently unclear how the recall of past experiences of enjoyable activity may influence future decisions to engage in such activities. This study investigated the potential effects of reward, effort, and possible memory distortions in influencing individuals' decisions to engage in activities. A novel set-up was developed to measure these effects in one session, using video games as the enjoyable activity.

9:30-9:45 AM

Bayliss G33

Communicating climate sensitivity beyond the likely range: Does framing the probability of extreme warming enhance climate risk perceptions?
Emma Vincan – Mark Hurlstone

This study examined how different approaches to framing climate impact uncertainty affected people's perceived risk of climate change and support for mitigative action. Participants were presented with a climate sensitivity distribution—a probability distribution illustrating the expected level of eventual warming—highlighting either (1) the likely range of warming; (2) the likely range of warming plus the probability of extreme warming; (3) the likely range of warming plus the probability of minor warming; or (4) the likely range of warming plus the probability of minor and extreme warming. Compared to the likely range only condition, it was expected that people's perceived risk of climate change and support for mitigative action would be (1) greater when the probability of extreme warming was additionally highlighted; (2) lower when the probability of minor warming was additionally highlighted; and (3) equal when both the probability of minor and extreme warming were additionally highlighted.

Wilsmore LT

Tough guys look angry! Can we manipulate judgements of facial strength by biasing perception towards anger?
Cody Witham – Yong Zhi Foo & Gillian Rhodes

The anger expression presents consistently in a typical muscle configuration. Why is it that the anger expression presents in this pattern? The recalibration theory hypothesises that the anger expression serves the evolutionary function of exaggerating facial cues of strength to help the angry individual experience better conflict outcomes. Recent evidence that an angrier face is rated as stronger than a control face lends support to this theory. This study aims to expand on the support for the strength-cue enhancing function of the anger expression and investigate whether other expressions also relate to strength perceptions. Results indicated that a face manipulated to be angrier was rated as stronger than baseline measures. A face manipulated to be more fearful was also rated as weaker than the non-manipulated baseline. Results have implications for the support of the recalibration theory of anger and an understanding of the broader relationship between expressions and strength perceptions.

Tattersall LT

The relationship between consumatory and anticipatory pleasure and effort
Dylan Desai-Rogers – Julie Ji & Colin MacLeod

The inability to experience pleasure, termed 'anhedonia', is one of two core symptoms of depression. Literature suggests that anhedonic individuals tend not to engage in reported pleasurable behaviours. The reason for this tendency has not been sufficiently explored, and thus, this study aimed to test several competing hypotheses regarding causes. The relationship between consumatory pleasure and effort, and anticipated pleasure and effort in a high-depressed group compared to a low-depressed group was examined. Fifty 1st-year students from the University of Western Australia, scoring high and low on the Beck's Depression Inventory, were recruited to test this relationship. Participants played a game for 10 minutes, and were allowed 15 minutes free time at the end with the option of playing the game again. The results of this study are not yet known. Possible findings providing a clearer understanding of the cognition driving anhedonia may contribute to improved interventions for depression.

9:45-10:00 AM

Bayliss G33

Reducing political polarisation of climate change attitudes with moral appeals
Cassandra Mircev – Mark Hurlstone

Polarisation of environmental attitudes stems from differences in Moral Foundations endorsed among political liberals and conservatives. Attenuation of this political polarisation has been observed when conservatives are presented with morally congruent environmental appeals. However, attenuation has never been accomplished with climate change appeals specifically. The current study sought to explore difference in ideological climate change attitudes after reading one of four messages framed in terms of the harm/care or purity/sanctity moral foundations in addition to either the environment or climate change. It was predicted that environmental messages would attenuate political polarisation when congruent with conservative moral values. In the climate change messages, no prediction was anticipated of how conservatives would respond—attenuation may likewise result, or climate change messages may backfire for conservatives. The results are implicated in appealing to a greater bandwidth of political ideologies in climate change communication and tackling the dangerous reality of climate change.

Wilsmore LT

Attractiveness judgements for own-race versus other-race faces
Zoe Akindele-Obe – Kate Crookes & Gillian Rhodes

The ‘other-race effect’ is a phenomenon where people can better discriminate between faces of their own race compared to other races. Expertise theories associate greater levels of exposure with finer sensitivity for own-race faces compared to less experienced other-race faces. The ‘other-race effect’ has been shown in several areas of face perception (e.g. gaze direction, sex and age judgements) motivating us to investigate whether it is present in judgements of facial attractiveness. Several universal criteria used to judge attractiveness have been identified however, individual variance in race-based facial sensitivity may too impact these decisions. We looked at how much Asian and Caucasian individuals agreed on the attractiveness of own- and other- faces, with the prediction that higher levels of agreement indicate the presence of an ‘other-race effect’.

Tattersall LT

Chase the face: Is this novel task more effective than conventional tasks at modifying disengagement bias and anxiety vulnerability?
Hannah Cruise – Colin MacLeod & Julian Basanovic

Theorists have debated whether anxiety-linked attentional bias results from impaired attentional disengagement from, or enhanced attentional engagement with negative information. Conventional dot-probe tasks commonly used to modify attentional bias with the intent to reduce anxiety vulnerability, often fail to evoke a change, resulting in no significant impact on anxiety vulnerability. Could this be because conventional probe tasks cannot distinguish or separately assess these two types of attentional bias? This study will compare a conventional probe task with a novel Chase-the-Face task that shows greater efficacy, using independent measures of assessment for attentional engagement and disengagement bias. Results show no significant attentional bias modification for either training tasks, so no conclusion can be made about the degree to which either task attenuates anxiety vulnerability.

10:00-10:15 AM

Bayliss G33

Mixed-list phonological similarity effects and Hebb repetition learning:
Constraints for theories of short-term memory and sequence learning
Matthew Walczak – Mark Hurlstone

How is the order of a novel sequence of verbal items remembered? According to chaining theory order is stored via inter-item associations, whereas according to positional theory order is stored via position-item associations. In short-term serial recall, chaining theory has been ruled out on the basis of the results obtained in studies of the mixed-list phonological similarity effect. However, it remains unclear whether chaining plays a role in the long-term learning of verbal sequences. The current experiment attempted to answer this question using the Hebb Repetition Paradigm. Participants remembered and recalled sequences of phonologically similar items, phonologically dissimilar items, or mixed-sequences in which phonologically similar and dissimilar items were alternated. Unbeknownst to participants, some sequences were repeated every few trials. The results and implications for theories of serial recall are discussed herein.

Wilsmore LT

Are you for real? Investigating the role of alexithymic traits in processing
emotional authenticity of facial expressions
Bronte Donatti-Liddelow – Romina Palermo & Linda Jeffery

The ability to perceive and utilise emotional authenticity information is an important part of facial expression processing ability. Due to the reliance on posed facial expression stimuli within the literature, little is known about what factors impact this ability. However, one factor that has been closely associated with weaker facial expression processing ability more generally, is level of alexithymia. Therefore, the aim of the current study was to examine whether atypical processing of emotional authenticity in facial expressions was associated with individual differences in level of alexithymia. To investigate this, undergraduate students rated the approachability and genuineness of genuine and posed facial expressions and level of alexithymic traits were assessed. Alexithymic traits were associated with some atypicalities in processing emotional authenticity in facial expressions. Results highlight the importance of employing both genuine and posed stimuli in facial expression research.

Tattersall LT

Attentional bias and processing style in predicting intrusions and distress
following trauma
Sienna Zimpel - Colin MacLeod & Julian Basanovic

This study sought to investigate the cognitive mechanisms underpinning individual differences in the degree that traumatic or negative events give rise to intrusions and distress. This study examined whether an attentional bias towards negative information (AB-N) and type of processing style (Implicational or Non-Implicational) independently predicted intrusion frequency and distress, or whether AB-N mediated the relationship between processing style and intrusion frequency, or distress, following exposure to negative film clips. Participants viewed negative and non-negative videos drawn from Hollywood films whilst adopting either an Implicational or Non-Implicational Processing style, and participants' AB-N was assessed immediately after. Frequency of intrusions and level of distress experienced was recorded over a subsequent seven-day period using an intrusion diary. Analyses reported that Implicational processing style and a higher AB-N was not associated with greater intrusion frequency and distress, and AB-N did not mediate the relationship between processing style and intrusion frequency, or distress.

10:15-10:30 AM

Bayliss G33

Incidental learning and selective memory: The power of rewards and sleep
Erin Roznoczny – Simon Farrell

In everyday life, people are confronted with an abundance of information. Although most of this information is quickly forgotten, the human brain is exceptionally effective at remembering information that is important for the future. The brain's ability to filter noisy environments for such information is driven by many signals, including the presence of a reward. Rewards generally have a positive effect on memory, but these effects are often confounded by motivation and attention. Using an incidental-learning paradigm, this study investigated the direct effect of reward on incidental learning memory to further our understanding of the reward-memory relationship. The enhancing effect of reward was not found independently of motivation and attention, which has important implications for current interventions used for individuals suffering from episodic memory issues.

Wilsmore LT

Do individuals with higher levels of autistic-like traits show weaker serial dependence of face identity?
Jessamy Burton – Romina Palermo & Linda Jeffery

Although autism is commonly characterized by a number of 'core' social, communicative and behavioural symptoms, individuals with autism also exhibit complex sensory and perceptual differences that are less well understood. A recent explanation for autistic perception has drawn on Bayesian Decision Theory to suggest that these puzzling differences may result from a weakened reliance on prior or contextual information when making visual judgments (Pellicano & Burr, 2012). This study sought to test this theory by investigating the relationship between autistic traits and a visual bias known as serial dependence, which is evident when an object seen in the present is biased towards an object seen immediately prior. We hypothesized that increased autistic traits would be associated with weakened serial dependence. Results and possible implications for future research, including exploring autistic traits and perceptual modalities outside of vision, will be discussed in the presentation.

Tattersall LT

Does a bias of attention mediate the relationship between trait and state anxiety?
Christian Long – Colin MacLeod & Ben Grafton

Anxiety dysfunction and vulnerability are characterised by an individual's increased tendency to selectively attend to threatening information from their environment, a concept known as attentional bias. It is unknown whether this bias accounts for an individual's level of state anxiety. As a result, the current study aims to understand the nature of the relationship involving the between-group factor of social anxiety, a bias of attention and state anxiety during a stressful experience. Results indicate that state anxiety and attentional bias are a function of social anxiety. In addition to this, attentional bias scores predicted state anxiety levels during, but not before, the stressful experience. However, there was no evidence that attentional bias mediated the relationship between social and state anxiety. Implications and areas for future research are discussed.

10:30-10:45 AM

Bayliss G33

The eyes have it...or do they?
Amelia Reynolds – Troy Visser

People tend to involuntarily follow the gaze of others, as whatever has caught someone's attention is often worth our attention too. However, some studies suggest that individuals of higher social status will ignore the gaze of those beneath them in the social hierarchy. Currently, racial stereotypes have been the only social status variable used to test this. The current study sought to manipulate social status with a non-visual stereotype, the offender stereotype. To do so, a standard gaze cueing paradigm was used, and stereotype was assigned via vignettes. Results indicated people reliably responded to gazes cues regardless of cueing face stereotype. This suggests that (1) the influence of social status may only occur when social status information is available visually or (2) the original effect was a product of different facet of the racial stereotype, such as stimulus familiarity. Both alternatives are addressed.

Wilsmore LT

Can general cognitive development account for age-related improvements in face recognition across childhood?
Saba Siddique – Romina Palermo & Linda Jeffery

Face identity recognition is a crucial social skill that develops across childhood; however the source of this improvement is controversial. Early research suggested improvements were due to development of face-specific perceptual mechanisms, but this evidence has been questioned. An alternative view argues general cognitive development across childhood accounts for improvements in face recognition; though no studies have directly assessed this hypothesis. This study measured selective and sustained attention and verbal and spatial ability in 203 5-9 year-olds, to investigate whether these general factors mediated the relationship between age and face recognition. In a multiple mediator analysis, only selective attention was a significant mediator, suggesting development of selective attention explained some of the age-related improvement in face memory tasks. This supports the general cognitive development view, suggesting processes not directly related to the face system may explain some of the age-related improvement in face recognition.

Tattersall LT

Looking for trouble: Does threat bias cause anxiety?
Joanna Tedeschi – Colin MacLeod & Ben Grafton

People with high trait-anxiety tend to show an attention bias towards threat (ABT), in which they pay more attention to negative or threatening information in the environment. ABT is observed across all anxiety disorders, so it is thought to be a general cognitive mechanism by which anxiety symptoms are increased upon exposure to a stressor. However, it is unclear as to whether ABT is a cause or mediator of anxious reactivity, because using a single task to measure attention bias cannot capture the distinct amount of state-anxiety caused by it. We solved this problem by manipulating selective attention such that state-anxiety changes were measured under two conditions: (1) a dual-video dot-probe task in which ABT could operate; and (2) a single-video task in which it could not. If the anxious reactivity of low and high-anxiety groups differs significantly between conditions, then it would support the hypothesis that ABT increases state-anxiety.

UWA **Honours Conference** **2018**

Morning Tea

10:45-11:15 AM

Bayliss Foyer

11:15-11:30 AM

Bayliss G33

Time flies: Consolidating working memory in children
Alex Wheeler – Donna Bayliss

Short-term consolidation describes the process which stabilises transient memory representations over time, making them more resistant to forgetting. Adults show increased recall performance when provided an unfilled delay after a memory item during working memory tasks, attributed to the opportunity to consolidate. Research in children aged 8- and 9-years old suggests that while they engage the process – it affects response times on subsequent processing tasks – memory performance does not improve as in adults. The current study aimed to determine whether short-term consolidation operates in children and begin to examine its development across middle childhood. Older children ($M = 10.67$), and a younger comparison group ($M = 8.97$) completed modified working memory span tasks, with the opportunity to consolidate manipulated. Results indicated memory performance was no greater in older children when time was available to consolidate, as in younger children. However, analyses of response times suggests the process is engaged.

Wilsmore LT

An investigation into the separability of autistic trait dimensions
Brooke Peden – Murray Maybery & Diana Tan

Autism spectrum disorder (ASD) is characterised by social and communication difficulties and restricted and repetitive behaviours. There is debate as to whether sets of these symptoms are independent at the behavioural and genetic level, reflecting distinct causes, or co-occur, reflecting common underlying causes. The current study addressed this debate by assessing if three autistic trait dimensions (social difficulties, repetitive motor behaviours, and insistence on sameness) are related in different ways to four basic cognitive-emotional constructs (sensory sensitivity, alexithymia, anxiety and intolerance of uncertainty) within the general population. Results from multiple regression analyses showed that the autistic trait dimensions had unique and shared cognitive-emotional predictors, highlighting that there are likely to be a combination of distinct and common causes underlying autistic traits and symptoms.

Tattersall LT

Are distorted emotional memories in depression caused by faulty memory shortcuts?

Chiara Ventris – Ben Grafton

Our memories are not always for specific events but are often more global in nature. A characteristic of individuals with high depressive disposition is increased tendency to report global memories that are more negative in affective tone. Despite the acknowledgement of the important role these memory distortions play in the onset and maintenance of depressive symptoms, the cognitive basis of them is not yet understood. This research investigated whether individuals with heightened levels of depression are employing heuristic processes either too frequently or in a biased manner, possibly causing distortions in global memories. A novel experimental paradigm was used to examine this theory with regards to the anchoring and recency heuristic.

11:30-11:45 AM

Bayliss G33

Does knowing another language make you smarter?
Alicia Teo – Allison Fox

Bilinguals were once said to have poorer academic performance and intelligence than their monolingual counterparts, though now the opposite has been said to be true. Many recent studies have suggested that bilinguals have superior executive functions. Executive functions have also often been positively linked to better performance in academic performance and intelligence. With reference to Miyake's (2000) model of executive functions, this study classifies executive functions as working memory, shifting, and inhibition. This study aims to investigate which of these executive functions are affected by bilingualism, and if the bilingual advantage in the said executive functions will yield superior results on standardized testing. A total of 27 bilingual and monolingual children, aged six to eleven, were tested on various aspects of executive functions, intelligence, and academic ability. This will help parents and educational institutions make informed decisions about the language environment they choose to immerse their young children in.

Wilsmore LT

Investigating facial emotion processing in individuals with autistic-like traits using the attentional blink task
Yu Lyn Ng – Murray Maybery & Michael English

The Attentional Blink (AB) occurs due to a limitation of attentional resources for the second target in a rapid sequence of images while the mind is still processing the first target. AB can be reduced with a more salient second target stimulus. Individuals with low levels of autistic-like traits (LAT) had attenuated AB when the second target was an angry face, whereas individuals with high levels of autistic-like traits (HAT) did not; implying that angry faces are not salient stimuli to HAT individuals (English, Maybery & Visser 2016). This study will investigate if the atypical processing of facial emotion in HAT individuals extends to happy faces. An extension of the AB will also be explored, where face stimuli are used as the first target in the presentation sequence. This variation on the AB paradigm will provide insight into the way emotion captures attention in individuals differing on the autism spectrum.

Tattersall LT

The effect of loneliness and a change in level of thwarted belongingness on persistence
Phoebe Carrington-Jones – Andrew Page

The Interpersonal Theory of Suicide posits that in conjunction with perceived burdensomeness, thwarted belongingness is a key proximal factor implicated in the causal pathway to suicidal desire. A recently devised Interpersonal Persistence computer task has enabled the study of induced high vs. low levels of thwarted belongingness. However, no research has investigated the effect of changing levels of belongingness over time. As belongingness is a dynamic state which fluctuates naturally, it's important to discern the experimental impact of a change in level of belongingness. Furthermore, whether a theoretical subcomponent of thwarted belongingness, loneliness, would interact with this change in belongingness. As hypothesised, analyses of results suggest that the impact of a change in belongingness on interpersonal persistence is significantly different to the impact of experiencing a stable state of belongingness. The further interaction with loneliness and implications of these findings are discussed.

11:45AM-12:00 PM

Bayliss G33

Too legit to quit: A psychometric evaluation of the APT
Ignacio Alarcon – Gilles Gignac

The purpose of this investigation was to expand on the work of Gignac and Wong (2018), by re-evaluating the psychometric properties of the Anagram Persistence Task (APT), a measure of test-taking motivation and persistence. The APT was conducted with longer maximum response time per item to overcome previously observed ceiling effects. Reliability of a single-anagram version of the APT was examined. Additionally, other self-report and behavioural measures of persistence were administered to examine convergent validity. A significant reduction in ceiling effects was observed and consequently, reliability for a single-anagram APT was increased (though not sufficient for research purposes). Furthermore, the single-anagram version correlated positively with several measures of persistence. The single-anagram version of the APT may not yet be regarded as preferred, however, further research is encouraged into the viability of a single-anagram version of the APT.

Wilsmore LT

Subtype differences in the link between emotion dysregulation and impulsivity
in adult ADHD
Sarah Stanton – Carmela Pestell

Emotion dysregulation (ED) is highly prevalent in ADHD adults particularly those with the combined subtype (ADHD-C). It is still unknown however whether ED is a core feature of ADHD or distinct yet related. ED is correlated with impulsive symptoms on self-report measures of ADHD however there is less evidence of this link using behavioural measures of impulsivity particularly difficulties inhibiting prepotent motor responses. This is a core deficit for adults with ADHD-C. In the present study adults with ADHD and controls completed a computerized impulsivity task and a self-report ED measure. Controls and ADHD differed on both these measures however no differences were found by subtype. ED mediated the relationship between ADHD and behavioural impulsivity and there was also evidence of moderation according to subtype. This adds to the body of evidence suggesting ED is a core feature of ADHD however subtype differences do exist and need to be considered.

Tattersall LT

Resilience to suicide: Does grit buffer against the interpersonal antecedents of
suicidal ideation?
William Hoffmann – Werner Stritzke

Suicide is a global health epidemic that is only growing as suicide rates are increasing. The Interpersonal Theory of Suicide asserts that experiences of interpersonal adversity can lead to suicidal desire. The protective influence of resilience factors against suicidal desire is supported by research. Grit is one such resilience factor that the current study hypothesised could buffer against an individual's desire to escape a difficult situation. We attempted to increase an individual's level of grit prior to the completion of a computerised task. This task experimentally induced heightened levels of interpersonal adversity in the form of perceived burdensomeness and thwarted belongingness. We then examined participant's desire to quit as they progressed through the task. We aimed to see an increased level of grit resulting in a decreased desire to quit the task. Results and implications for suicide prevention strategies will be discussed.

12:00-12:15 PM

Bayliss G33

Catching the fakers. Socially desirable responding in personality questionnaires
Joan Chan – Djurre Holtrop

Recent research found that lie scales do not measure faking, but measure honesty instead. In this study, we sought to show that lie scales measure lying. Participants were split into two conditions: high stakes; where participants were motivated to fake good; and low stakes. Using Verbal Protocol Analysis (VPA; Bainbridge & Sanderson, 2005), the spoken thoughts of our participants as they were completing the lie scales were recorded. Subsequently, these thoughts were rated on their honesty. We also investigated why lie scales are positively correlated to honesty. We proposed that core self-evaluations mediate the relationship between honesty and lie scales. We found a negative correlation between the rated honesty and lie scales, demonstrating that lie scales measure faking. We also found that stakes moderate the relationship between honesty and lie scales. However, core self-evaluations failed to mediate the relationship between honesty and lie scales.

Wilsmore LT

Does executive function influence intra-individual variability?
Francesca Buhagiar – Michael Weinborn & Carmela Pestell

Cognitive decline such as executive dysfunction (EF) occurs progressively in healthy ageing. EF is usually measured using mean performance variation however, intra-individual variability (IIV), an individual's variation between trials, has been identified as a more sensitive, early detection measure for cognitive changes. We aimed to understand whether EF predicted IIV and whether it was influenced by cognitive reserve (resilience to cognitive decline). The study recruited 180 community-dwelling individuals aged 65 to 92, in the University of Western Australia's Healthy Ageing Research Program. IIV on a lexical decision-making task was measured using reaction time coefficient of variation. The Frontal Systems Behaviour Scale (FrSBe) was used to measure EF via apathetic, disinhibition and dysexecutive subscales. The hypothesis that higher FrSBe scores would predict higher IIV; and the hypothesis that cognitive reserve would moderate this relationship were not supported. In conclusion, EF does not predict IIV and is not moderated by cognitive reserve.

Tattersall LT

Making the link: Exploring the cognitive mechanisms underpinning eating disorder symptomology
Tahlia Sanders – Jason Bell

Past literature has indicated that ruminative thinking may mediate the relationship between attentional biases (ABs) towards thin-ideal female bodies and eating disorder symptomology. However, research to date has failed to find a causal relationship between ABs and rumination. This study aimed to trial a new research design to directly measure the impact of modifying ABs upon participants' rumination scores, addressing the potential confounds limiting previous studies in this area. A sample of 100 participants were asked to complete measures of state rumination and attentional bias, before and after completing an attentional bias modification task. The hypothesis that training attention towards thin bodies would increase state rumination, was not supported. This suggests that ABs and ruminative thinking could be distinct risk factors in influencing eating disorder symptomology. Future research should investigate how other related variables might interact to influence the relationships between these three factors.

12:15-12:30 PM

Bayliss G33

A think-aloud study: Is the use of lie scales affecting your chance of getting a job?

Grace Steedman – Djurre Holtrop

Lie scales are commonly included in personality inventories, in an attempt to identify fakers. However, researchers have recently questioned what lie scales actually measure. We explored this dilemma using a speak-aloud protocol to investigate the validity of lie scales. Study 1 included 46 undergraduate students randomly assigned to conditions (N = 24 low-stakes, 22 high-stakes), whose spoken thoughts were recorded whilst completing a lie scale. Personality traits were also measured on a personality scale. Study 2 included 175 Amazon Mechanical Turk workers rating the honesty of Study 1 participants. Results showed that honesty ratings negatively predicted lie scale scores, indicating the lie scale was successful in detecting fakers. Practical implications for the use of lie scales in personnel selection are proposed. Subsequent analyses revealed that personality traits and motivation did not interact in predicting honesty ratings. Individual differences in responding to high-stakes situations and ability to fake are discussed.

Wilsmore LT

Did you hear that? Anomalous perceptual experiences in older adults

Danielle Fynn – Michael Weinborn, Johanna Badcock, Georgie Paulik-White

Anomalous perceptions occur in a substantial minority of community-dwelling older adults (≥ 50 years). The literature suggests that social isolation and loneliness are direct risk factors for anomalous perceptions, however potential indirect effects have not been tested. The current study challenges the implicit assumption that only simple direct effects exist, exploring the potential mediating effect of sleep quality and moderating effect of depression in the relationship between social isolation/loneliness and anomalous perceptions. Healthy older adults (N = 117) completed self-report questionnaires, measuring social isolation, loneliness, sleep quality, depression and anomalous perceptions, and were analyzed using Hayes (2013) Conditional PROCESS Analyses. The proposed moderated mediation model was statistically non-significant in this sample, however loneliness (not social isolation) was found to predict anomalous perceptions. This has important theoretical implications, highlighting that objective social isolation and subjective loneliness need to be addressed as distinct constructs in this field of research.

Tattersall LT

Attentional bias to thin bodies: Investigating the role of attentional bias modification on negative affect

Georgia Turnbull – Jason Bell

Research by Dondzilo et al. (2018) demonstrated that an attentional bias towards thin bodies makes people vulnerable to negative mood following stressors. However, the direct impact of attentional biases on state negative mood remains unknown. This current study investigated whether attending to thin body images had a direct effect upon state negative affect. Female undergraduate students (N = 96) underwent attentional bias modification (ABM) training. Participants were randomly allocated to 'attend' or 'avoid' thin body images. State negative affect was measured before and immediately following ABM training. Results showed that participants attending to thin bodies decreased in negative affect (i.e. became happier). Conversely, participants avoiding thin bodies showed increased in negative affect (i.e. became sadder). These results are the first to demonstrate that attentional biases directly impact mood. Additionally, it provides evidence that attending to thin bodies may have a positive impact on state mood.

12:30-12:45 PM	
Bayliss G33	Organisational socialisation and perceived organisational support in newcomers Micah Grishina – Djurre Holtrop
<p>Past research has yet to investigate how specific organisational socialisation tactics affect specific newcomer adjustment outcomes (NAOs). This has led to mixed results and a lack of causal relationships being established between the latter. Our study uses an experimental method to investigate the presence of a causal relationship between NAOs and the specific socialisation tactic of investiture vs divestiture. We also investigate whether perceived organisational support (POS) levels intervene in this relationship to affect NAOs. Eighty-nine students attended a mock job induction as ‘new employees’ and completed an air traffic control task while exposed to manipulations reflecting each tactic. Results revealed that there was no significant effect on NAOs from either condition. However, a complete indirect effect was found: investiture participants who felt higher amounts of POS showed higher levels of engagement. These findings suggest there are likely intervening variables that need to be taken into consideration during socialisation processes.</p>	
Wilsmore LT	No talk
Tattersall LT	Assessing the efficacy of a touchscreen device for attentional bias modification in eating disorder research Rebecca Shao – Jason Bell
<p>Attentional bias (AB) towards thin-ideals is a risk factor for eating disorder symptomatology. Research has demonstrated that AB can be modified using a keyboard response method to the dot-probe task, but whether similar findings can be obtained using a touch screen remains unclear. This study investigates whether AB towards thin-ideal images can be measured and modified using a touch response method to the dot-probe task. Further, it aims to determine whether modifying AB has an effect on individual’s ruminative thinking. Eighty female participants from UWA completed measures of eating disorder-related constructs, and a dot-probe task. As hypothesised, the dot-probe task successfully induced differential changes in AB in the expected directions. The task induced a significant change in depressive, but not eating-disorder specific rumination. These findings indicate that AB towards thin-ideals can be effectively retrained using a touch screen, and that this training has an effect at the individual level.</p>	

UWA **Honours Conference** **2018**

Lunch

12:45-1:45 PM

Bayliss Foyer

Honours Information Session for Prospective Honours Students

1:00-1:30 PM

Wilsmore LT



1:45-2:00 PM

Bayliss G33

Emerging as a leader: The role of leader identity and state humility
Jack Dowling – Darja Kragt

An important step towards developing as an effective leader is to gain experience by emerging as a leader. The goal of my research is to establish why certain individuals are more likely to embrace opportunities to emerge as a leader. In the present study, each participant was given the opportunity to emerge as a leader during two group tasks. Based on the integrative model of leader development, I predicted that individuals with a strong leader identity would be more likely to emerge as leaders. Based on a review of the literature, I also theorised that individuals with a low level of state humility would be more likely to display task-oriented leader emergence, and that individuals with a high level of state humility would be more likely to display relations-oriented leader emergence. However, the results revealed that none of these predictions were supported. Possible reasons for these findings will be considered.

Wilsmore LT

The impact of disease severity and cognitive reserve on the relationship
between obstructive sleep apnoea and cognition
Mikayla Conlan – Romola Bucks & Maria Pushpanathan

Obstructive Sleep Apnoea (OSA) is associated with poorer cognitive performance. However, evidence for a dose-response relationship between disease severity and degree of cognitive harm is inconsistent. To investigate the mechanisms behind this phenomenon, I compared a new measure of disease severity, the Integrated Area of Desaturation (IAD), which better targets hypoxia, to the traditional measure, the Apnoea-Hypopnoea Index (AHI). I also explored the moderating role of cognitive reserve. 108 participants underwent overnight polysomnography and cognitive testing, producing six scores assessing the domains of attention, memory and executive function. The IAD was a significant predictor of performance in only one analysis, and the AHI did not significantly predict performance at all. Cognitive reserve predicted some facets of cognition, but only one analysis produced a significant interaction, and not in the manner expected. These findings may have implications for the use of the IAD and for the role of hypoxia in OSA.

Tattersall LT

The road less travelled: The impact of common factors on treatment outcomes
and attrition in adult anorexia nervosa
Hannah West – Susan Byrne

Empirical attention for adult Anorexia Nervosa has fixated on competing specific treatment models to demonstrate one's superiority. By shifting empirical attention towards the common factors of therapy to explain the mechanisms of change, the poor clinical outcomes currently seen in adult Anorexia Nervosa can be improved. Utilising multiple regressions, a secondary analysis was conducted on a subset of patients (n=64) involved in the SWAN trial to investigate whether the Therapeutic Alliance, Therapists Adherence, and Patient's Expectations could predict treatment outcomes beyond the effects of the three 'specific' treatments utilised in the trial (CBT-E, MANTRA, SSCM). Alliance, specifically mid-late, predicted changes in weight gain, beyond the effects of treatment type. Patient Expectations and Therapist Adherence in CBT-E predicted changes in eating disorder pathology beyond the treatment type. Neither the specific treatment nor any common factors predicted dropout. Implications and limitations are discussed, as well as suggestions for future research.

2:00-2:15 PM

Bayliss G33

Are leaders born or made? A study on the effects of mindset and leader identity on leadership emergence
Jasmine Siew – Darja Kragt

An individual's mindset about leadership, that is whether they believe leaders are born or made, has been proposed to interact with the way they see themselves as leaders, otherwise called their leader identity, and consequently impact leadership emergence (Day & Harrison, 2007). The present study aims to understand this relationship, thus hypothesising that a stronger leader identity will lead to stronger leadership emergence and secondly, that the relationship between mindset and leadership emergence will be more strongly moderated by leader identity in the presence of a fixed mindset, than in the presence of a growth mindset. However, despite the research to support the development of both hypotheses, this study found insignificant results. Nevertheless, an investigation into these results posed several interpretations and future directions towards further understanding these relationships and leadership development, and therefore advancing the development of work climates.

Wilsmore LT

Suffocating sleep: Clarifying the relationship between obstructive sleep apnoea and attention
Alex Berry – Romola Bucks & Maria Pushpanathan

Obstructive Sleep Apnoea (OSA) is a disorder defined by regular disruptions to breathing during sleep. This results in reduced oxygen to the brain and poor sleep quality, causing cognitive symptoms. Amongst these, attention is particularly affected. However, many studies question the generalisability of this effect. Two moderating factors: cognitive reserve (mental efficiency against neurodegeneration) and high age (as a determinate of OSA vulnerability) may define increased risk. Data were accessed from an epidemiological study in Busselton, with 2,593 participants aged 44-70. Speed and accuracy of attention were analysed, and a moderated moderation model was significant. OSA significantly reduced the accuracy of attention only in vulnerable groups (based on low cognitive reserve and high age). These findings support that OSA effects may be underestimated and overestimated depending on moderators. However, the small effect size motivates future research into more reliable OSA measures and further replication.

Tattersall LT

Attitudes towards psychological services: Do university students prefer internet-based or face-to-face therapy?
Shannon Kelly – Neil McLean

Although help seeking is potentially lifesaving, many university students who face mental health problems do not seek help despite the availability of effective psychological treatments. Reluctance to engage in help-seeking behaviour is thought to be related to gender, psychological distress and several barriers: concrete barriers, emotional control, problem minimisation and need for control. Face-to-face therapy can also be perceived as confronting, however new opportunities arise to treat mental health problems via the Internet that may appeal to students and can overcome these barriers. The current study used a vignette to explore attitudes towards online and face-to-face treatment in one hundred university students. Gender, distress and several barriers to help seeking were also investigated as they influence treatment attitudes. The results suggest that the majority of participants had positive attitudes towards face-to-face services. This research can inform clinical practice by enhancing the understanding of treatment attitudes and improving treatment uptake.

2:15-2:30 PM

Bayliss G33

Automation failure and the impact of perceived automation reliability
Natalie Griffiths – Shayne Loft & Vanessa Bowden

Automation is becoming a part of a large number of work environments with the aim of reducing the possibility of human error. However, humans are not well-suited to passive automation monitoring. When automation operators experience highly reliable automation they can become complacent, resulting in them relying excessively on their automation. When automation fails they are then worse at detecting this failure than if they were manually completing this task themselves. Our study used simulated Air Traffic Control with the aim of determining whether perceptions of system reliability and subsequent operator trust in the automated system would affect automation failure detection. Here we show that automation induces trust and complacency in operators regardless of whether they are told that their automation is of high or low reliability. The finding that operator complacency is resistant to warnings about automation reliability will be important in the design and implementation of automated systems.

Wilsmore LT

Direction discrimination when multiple objects are in motion: Effects of spatial frequency, local information and relative position
Julia Haile – David Badcock

Sometimes objects are perceived to move differently from their true direction due to the movement of the background or a secondary object. A potential explanation for this illusion and why it doesn't always occur are the opposing processes of local motion signal pooling and segmentation. Spatial frequency, local information, and relative position of objects may act as segmentation cues. These have not been tested as object-motion segmentation cues. Observers viewed two concentric rings, one target and one distractor, where the distractor was either inside or surrounding the target and consisted of the same elements as the target or different elements. Direction discrimination was more accurate when the distractor surrounded the target and was defined by different elements. This was stronger for local information than for spatial frequency. This provides evidence for local information and spatial frequency being used as partial cues for segmenting motion to reduce motion interference.

Tattersall LT

Attitudes towards treatment for depression amongst psychology and non-psychology students
Michelle Lopez – Neil McLean

Despite the availability of several highly effective interventions targeting depression, it is estimated that less than half of people suffering from depression receive the treatment they require. One of the barriers to treatment concerns attitudes towards the way depression is conceptualised by health professionals. The current study used a hypothetical vignette to assess attitudes towards a proposed diagnosis, comfort with a proposed treatment, and intention to complete that treatment amongst participants exposed to either a biological or psychological model of depression. As previous studies in this area have predominantly used samples of psychology students, it is unclear whether a preference for the psychological model is due to a bias in the sample. Thus, the current study recruited students from various disciplines to further our understanding of attitudes towards treatment and investigate whether factors that may impact attitudes, such as gender and psychological mindedness, differ between the student populations.

2:30-2:45 PM

Bayliss G33

Can we really learn from our mistakes? A study investigating the effectiveness of error training in a team setting
Jacqueline Lim – Lisette Kanse & Gilles Gignac

Workplace errors are inevitable, therefore positive features of errors such as learning for better future outcomes and developing problem solving skills should be harnessed by organisations. Error management training (EMT) encourages errors during training, so that employees are better equipped during real life situations. Compared with error avoidance, where errors are criticised, EMT has been found to improve individual employee performance. This study aimed to apply EMT to team settings, and investigated personality traits as a moderator of performance. Thirty teams of two participants from UWA were randomly assigned into either EMT or error aversion training teams, and underwent a virtual team task. It was predicted that EMT teams would perform more errors than error avoidance teams during the practice phase, but outperform error avoidance teams during the testing phase. Findings could provide organisations with evidence of effective team training styles and team personality traits conducive to reducing workplace errors.

Wilsmore LT

Playing charades: Investigating the link between executive function and communication efficacy
Micah Tan – Nicolas Fay

Previous research has shown that people differ in non-linguistic communication efficacy. Specifically, in gesture communication (communication through body movement such as with arms and hands) and non-linguistic vocalisation communication (communication through sounds which aren't words). It has also been shown that gesturing is more effective than non-linguistic vocalising. However, there is little research in why these differences exist. The current study aimed to explore executive function as a potential factor of non-linguistic communication efficacy as well as replicate findings that gesture communication is more effective than non-linguistic vocalisation communication. Participants (N = 72) were tasked to communicate words through gesture and non-linguistic verbalisation. These were matched to words by another group of participants (N = 34) to measure communication efficacy. Participants were also tested on a range of tasks measuring executive function, verbal fluency, and intelligence. Results and implications, and direction for future research will be discussed.

Tattersall LT

What's in a name? The impact of treatment label on treatment perceptions
Hayley Jackson – Jeneva Ohan

Psychological therapies are increasingly labelled using neutral or positive language, as opposed to negative language conveying diagnostic information. Whether this practice improves treatment perceptions has not been tested. Previous research on the affect heuristic suggests that positive labels should result in more favourable affect and therapy judgements than neutral labels, which in turn should result in more favourable affect and judgements than negative labels. To test this, 223 university students were randomly assigned to view one of three therapy brochures, altered only by therapy label, before rating affect and judgements. Results of multivariate and univariate analyses indicate limited support for the affect heuristic—participants in the positive condition reported more positive affect than participants in the neutral and negative conditions. However, this did not translate to predicted changes in judgements. Findings represent an important first step to understand how best to label therapy.

2:45-3:00 PM

Bayliss G33

Defusing virtual bombs! Error management, virtual teams, and video games
Katherine Nguyen – Lisette Kanse & Gilles Gignac

Error management training (EMT) encourages individuals to make errors and to learn from them. Research has frequently shown EMT leads to greater increases in individual performance compared to tradition training approaches such as error avoidance training (EAT). Evidence suggests that the self-regulatory process of emotion control mediates the effects of EMT and individual performance. The present study investigates whether performance effects mediated by emotion control in EMT are replicable in a virtual-team setting. One-hundred-and-twenty students from the University of Western Australia completed a computer task in teams of two, using the software program Keep Talking and Nobody Explodes. Teams were assessed in either EMT or EAT conditions to determine whether EMT results in greater performance. Results did not indicate significant differences in performance between the conditions, indicating that emotion control may not mediate performance in settings which require more than self-regulation, but also regulation of team-mate emotion.

Wilsmore LT

Empathy and perspective-taking: Do they make a difference in communication?
Yiing Tan – Nicolas Fay

Previous research has shown humans possess the ability to recreate communication systems in the absence of pre-existing communication. While that has been affirmed, another question emerged, which is how individual variations would influence the ability to recreate new communication systems. Existing communication theories often argue that empathy and perspective-taking are essential for an effective communication to occur, but there are also theories that suggest factors such as priming to be important. The present study addresses this question by investigating empathy and perspective-taking's relation to communication success. Participants had their empathy and perspective-taking assessed, then played a communication game like charades, but also needing to make non-linguistic vocalizations aside from gesturing for words. It was firstly hypothesized that individuals with greater empathy and perspective-taking are better communicators. It was also hypothesized that individuals would perform better in the gesture modality than the non-linguistic vocalization modality. Results and implications will be discussed.

Tattersall LT

The role of pleasure in the restoration of directed attention following exposure to a natural environment
Bernadette Hodgins – Carmen Lawrence

Spending time in the natural environment has been shown to improve directed attention and increase positive emotions, however the precise psychological mechanisms through which this occurs are unknown (Berman, Jonides, & Kaplan, 2008). To test whether pleasure and/or arousal mediate the positive attentional effects that typically follow exposure to nature (Berman et al., 2008), University of Western Australia (UWA) psychology undergraduate students (n = 75) were compared in a between subjects (nature, urban and control environment) design using the repeated measures of Digit Span Backwards (DSB), pleasure and arousal. Performance on DSB improved from time 1 to time 2 equally across all groups, demonstrating that there was no effect of environment on attention. Important methodological differences between experiments are discussed along with implications for future research.

3:00-3:15 PM

Bayliss G33

No talk.

Wilsmore LT

Communicating the negative: Moderating negative transmission bias through social context
Kathryn Somerville – Nicolas Fay

The social transmission of information can shape human cultural evolution over generations. This inter-generational transfer of information is affected by a negative transmission bias, resulting in the transformation of information to favour the survival of negative elements. As this bias occurs socially, it may be moderated by differing levels of communicative intent. This study aims to see if three different conditions of communicative intent can affect the influence of this bias on the inter-generational transfer of information. We hypothesise that the bias will be observed across all conditions but will be the greatest in the condition with the least intent to communicate. Results support these hypotheses, indicating intent may moderate this bias. This has implications for understanding how humans pass on negative information and highlights the potential for future research into the impacts of communicative intent on information transfer across other communication channels, such as social media.

Tattersall LT

Math anxiety and math performance in children: The mediating role of working memory
Pamela Bethell – Allison Fox

Although math anxiety and low working memory are associated with poor math performance, majority of past research has been conducted with undergraduate samples and not young children. In the current study I investigated how math anxiety and working memory impact math performance in primary school children. Twenty-seven primary school children (12 Male, 15 Female) participated in the children's activity program hosted by the neurocognitive development unit at The University of Western Australia. The children were given a measure of working memory, math anxiety, state and trait anxiety, math performance and IQ. A mediation analysis was run, with the total and direct effect of math anxiety on math performance being insignificant while working memory significantly impacted math performance. These results highlight the importance that working memory plays in math performance while math anxiety wasn't detected in the current sample and requires further investigation.

UWA

Honours Conference

2018

Afternoon Tea

3:15-3:45 PM

Bayliss Foyer

Keynote Presentation: Julie Ji

3:45-4:15 PM

Wilsmore LT

Best Presentation Award and Closing Address: Ullrich Ecker

4:15-4:30 PM

Wilsmore LT

