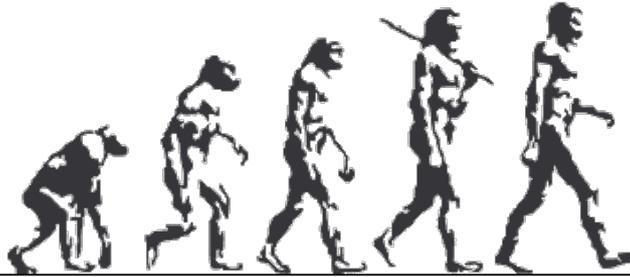


EPinOZ 2019



The second annual conference of the Australasian Society for Human Behaviour and Evolution (ASHBE), 6th December, 2019.

ashbe.org

Oral presentations

9.00am – 5.20pm

205 Lecture Theatre
UNSW Business School, E12
Gate 3, High Street
Kensington, 2033

After conference drinks and dinner

6.00pm

The Coogee Pavillion, Rooftop
169 Dolphin Street, Coogee

Schedule of Talks

| Time | Speaker | Title |
|--------------------|--------------------------------|--|
| <i>9.00-9.40</i> | <i>Set-up and registration</i> | |
| 9.40-9.50 | Peter K Jonason | President's Welcome & Opening remarks |
| 9.50-10.10 | Khandis Blake | Status anxiety mediates the positive relationship between income inequality and sexualization |
| 10.10-10.30 | Evita March | Netflix and chill? Sex differences in (hypothetical) booty-call mate preferences |
| 10.30-10.50 | Dax Kellie* | Behind the makeup: How cosmetic application affects women's agency and competitiveness, as well as others' perceptions |
| 10.50-11.10 | Peter Marshall* | Testing the perspective hypothesis: Do height differences affect perceptions of dimorphism, attractiveness, and dominance? |
| 11.10-11.30 | Phil Kavanagh | Life history strategies and eating disorder symptomology |
| <i>11.30-12.00</i> | <i>Morning tea</i> | |
| 12.00-12.20 | Dani Sulikowski | Have we met? Recognising the psychopath's face |
| 12.20-12.40 | Adrian Cuerva* | The dominance and attractiveness of muscularity |
| 12.40-1.00 | Ian Stephen | What do our faces and bodies tell people about us? |
| <i>1.00-2.00</i> | <i>Lunch</i> | |
| 2.00-2.20 | Chris Jackson | A multilevel super metatheory of personality metatheories |
| 2.20-2.40 | Laura Greco* | Over Expression of the microRNA miR-137 in the dorsal striatum promotes compulsive cocaine-seeking |
| 2.40-3.00 | Francesca Romana Luberti* | Romantic rejection decreases men's, but not women's, sexual openness: An experimental test of dating popularity |
| 3.00-3.20 | Jacob Dye* | Psychopathic traits as a fast life strategy: some outcomes |
| <i>3.20-4.00</i> | <i>Afternoon tea</i> | |
| 4.00-5.00 | Bill von Hippel | Plenary: The Social Leap |
| 5.00-5.20 | Peter K Jonason | Closing Remarks and presentation of student prizes |

Plenary Speaker

Professor Bill von Hippel
University of Queensland

The Social Leap

The most basic aspects of our psychology were shaped by the "social leap" our distant ancestors made from the rainforest to the savannah. In their struggle to survive on the open grassland, our ancestors prioritized cooperation and teamwork over physical prowess, creating a new form of social intelligence that set the stage for our rise to the top of the food chain. In this talk I briefly trace our evolutionary history over the last six million years to show how events in our distant past guide our lives today.



Submitted abstracts (in alphabetical order of presenting author)

Status anxiety mediates the positive relationship between income inequality and sexualisation

Khandis Blake¹, Robert C. Brooks²

¹*University of Melbourne*

²*University of New South Wales*

Income inequality generates and amplifies incentives, particularly incentives for individuals to elevate or maintain their status, with important consequences for the individuals involved and aggregate outcomes for their societies. Economically unequal environments intensify men's competition for status, respect, and, ultimately, mating opportunities, thus elevating aggregate rates of violent crime and homicide. Recent evidence shows that women are more likely to post sexy selfies on social media and that they spend more on beautification in places where inequality is high, rather than low. Here we test experimentally for causal links between income inequality and individual self sexualization and status-related competition. We show that manipulating income inequality in a role-playing task indirectly increases women's intentions to wear revealing clothing, and that it does so by increasing women's anxiety about their place in the social hierarchy. The effects are not better accounted for by wealth-poverty than inequality, or by modelling anxiety about same-sex competitors in place of status anxiety. The results indicate that women's appearance-enhancement is partly driven by status-related goals.

The Dominance and Attractiveness of Muscularity

Adrian Cuerva¹, Ian Stephen¹, Kevin Brooks¹

¹*Department of Psychology, Macquarie University*

The current thesis seeks to understand whether perceptions of attractiveness and dominance provide the selection pressure for male muscularity. To achieve this, three studies were conducted using correlational methods, principal components analysis and experimental methods. Photographs of N = 91 male subjects were rated on both attractiveness and dominance by N=60 university students. Principal components of body shape were extracted from the photographs using geometric morphometric methods and their relationship to muscularity, as well as attractiveness and dominance ratings were analysed. Participants also manipulated computer generated 3D male avatars along a muscularity transform to appear normal, attractive and dominant across three within-subjects conditions. Consistent with previous literature, the relationship between attractiveness ratings and muscularity followed a quadratic function and the relationship between dominance ratings and muscularity followed a positive linear function. Both relationships appeared to be of similar strength. Four principal components of male body shape were identified as important when making attractiveness and dominance judgements regarding muscularity. Lastly, participants consistently adjusted bodies to appear more muscular when asked to create dominant bodies compared to when they were asked to create attractive bodies. It was suggested that perceptions of attractiveness and dominance may place selection pressure on differing levels of muscularity, with female choice, male-male contest and natural selection mechanisms possibly existing in equilibrium with one another.

Psychopathic Traits as a Fast Life Strategy: Some outcomes

Jacob Dye^{1,2}, Lillian Cavallaro², Alejandra Finos², Rana Elmir², Katie Dowler², Andrew Morrow², and Sarah Coote²

¹*School of Psychology, University of Newcastle*

²*School of Psychology, Charles Sturt University*

Psychopathy is classified by the DSM-V as a clinical disorder. However, over the last 25 years, researchers have been debating whether this cluster of traits would be better explained as an adaptive phenotype. Life-history based explanations posit that psychopathy is a fast life strategy, resulting from a combination of genetic predisposition and exposure to early life adversity/resource scarcity. The outcomes of this phenotype allow for 'creative' solutions to resource scarcity and a need to reproduce quickly. In the past two years, using a variety of online samples, we have looked at the relationship between early-life adversity, life history K-factor scores, and psychopathy. We have also considered outcomes such as socio-sexuality, dating morality, vocational aspirations and behaviours, satisfaction with life, and social relationships. In line with previous research we have found that psychopathy is predicted by adverse childhood experiences and a fast life history. We have also found that psychopathy is predictive of a host of outcomes, and further, that psychopathy often acts as a mediator between adverse childhood experiences/life-history and these outcomes. Here I will take you on a whirlwind tour of what we have found and discuss how these findings can be interpreted as evidence for the idea of psychopathy as a fast life phenotype.

Over Expression of the microRNA miR-137 in the dorsal striatum promotes compulsive cocaine-seeking

Laura Greco¹

¹*University of Newcastle*

Humans share an almost identical coding genome sequence similarity to primates yet are remarkably different cognitively. Non-coding features of the genome that influence gene regulatory networks, such as microRNAs (miRNA), have been hypothesised to have driven the structural and functional changes associated with the divergence of humans from non-human primates. miRNAs showing humanspecific expression have also been found to be localised in neurons where they have been shown to be key regulators of neural function and behaviour. Several variants in proximity to the MIR137 gene locus are strongly associated with the development of psychiatric disorders including schizophrenia. We previously observed that the encoded miRNA at this gene, miR-137, is differentially expressed in subregions of the dorsal striatum at different phases of the addiction cycle and hypothesised that it may also modify compulsive behaviour. To model this in vivo we used a lentiviral construct to induce over-expression of a pre-miR-137 transgene in the striatum of Sprague-Dawley rats and observed that there was a higher tolerance for punishment to maintain pre-transgene cocaine self-administration compared to controls. The present results support a link between dysregulated expression of miR-137 and compulsive drug-seeking. These findings provide insight into the mechanisms linking psychiatric illness with addiction, and hopefully a better understanding of the neural substrates responsible for these disorders.

A multilevel super metatheory of personality metatheories

Chris Jackson¹, Amirali Minbashian¹, Christian Criado-Perez¹

¹*University of New South Wales*

Our aim is to explicate a multi-level super meta-theory of personality that incorporates many of the ideas from previous metatheories. To do this, we understand personality traits as comprising neuronal substrates and mental representations. Using a multi-level metatheory, we explore the link between neuronal substrates of personality, mental representations and reproductive success. We argue that the function of neuronal substrates of personality is to facilitate reproductive success, whereas the relationship between mental representations and reproductive success is different at different levels. Our super multi-level meta-theory of personality provides an over-arching umbrella for existing meta-theories, articulates how different levels of thinking need to be integrated to better understand personality architecture, and helps explain why some human cognitions, emotions, motivations and behaviors are not always associated with reproductive success.

Life history strategies and eating disorder symptomology

Phil Kavanagh¹, Bianca Kahl²

¹*University of Canberra*

²*University of South Australia*

Recently, life history theory conceptualisations of psychopathology have been proposed to account for and explain the aetiological trajectory of various mental health disorders; however, to-date there has been limited empirical research investigating psychopathology through the lens of life history theory. The current experimental study investigated the associations between various markers (e.g., pubertal timing, fecundity, number of siblings) and traits of life history strategies (i.e., the K-SF-42), and a number of factors known to be precursors to developing eating disorders (e.g., body image concerns, body appreciation, self-compassion), aiming to answer the research question: to what extent do life history strategies and expectations (i.e., potential mismatch) influence the effect of being exposed to ideal body images and can variations in life history strategies predict those people who are more likely to develop eating disorders? Participants were randomly allocated to view either travel images, or images of fit and overweight males and females. Participants assigned to the people condition were asked to rate their level of body satisfaction, appreciation, and self-compassion after viewing images. All participants completed pre- post- body image concerns measures as well as measures and indicators of life history strategies and expectations about their environment. Data are still being analysed.

Behind the makeup: How cosmetic application affects women's agency and competitiveness, as well as others' perceptions

Dax Kellie¹, Khandis Blake², Robert C. Brooks¹

¹*University of New South Wales*

²*University of Melbourne*

Makeup is known to elevate women's perceived attractiveness and femininity. Some people associate it with unfaithfulness and promiscuity, qualities for which women are judged more harshly than men. Whether the use of makeup can benefit women by changing how they perceive themselves, or hinder women by changing how others perceive them, remains unclear. Over two experiments, we investigated the effects of makeup on a) women's self-perceived traits, and b) others' objectifying perceptions of them. In Experiment 1, we asked 229 women to imagine one of four scenarios (e.g., a romantic date), and half were asked to apply makeup to suit that scenario before rating their self-perceived agency, humanness, intrasexual competitiveness and mate guarding resistance. In Experiment 2, 422 men and 422 women rated images of women's faces from Study 1 on their mental capacity and moral status. We found little evidence that applying makeup affected women's self-perceived traits. However, women wearing moderate to high amounts of makeup were attributed less mental capacity and moral status by others. These findings suggest that although there exists cultural and competitive pressure on women to use makeup to appear attractive, negative stereotypes of makeup use may lead to detrimental perceptions of women.

Romantic rejection decreases men's, but not women's, sexual openness: An experimental test of dating popularity

Francesca Romana Luberti¹, Khandis Blake², Robert C. Brooks¹

¹*University of New South Wales*

²*University of Melbourne*

An individual's mate value often predicts their socio-political attitudes, as high mate value individuals are often more sexually unrestricted, but also less economically egalitarian, than lower mate value individuals. However, experimentally manipulating romantic acceptance and rejection can shift participants' self-perceived mate value, and consequently their socio-political attitudes. In this experiment (N = 237), we manipulated heterosexual participants' popularity among five peers of the opposite sex and measured whether it affected participants' socio-political attitudes (i.e., participants' explicit attitudes towards traditional gender roles, sexual openness, and economic redistribution, and their implicit sexual and political attitudes). We found that receiving a higher number of negative responses from opposite-sex peers significantly decreased men's, but not women's, explicit sexual openness. This effect was mediated by men's positive emotions, so that a higher number of negative responses decreased men's positive emotions, which in turn decreased their sexual openness. We found no other significant effects of romantic feedback. On average, men reported higher endorsement of traditional gender roles, sexual openness, and implicit preference for casual over committed relationships than women did. The sex difference in explicit sexual openness however disappeared the more negative responses men and women received, and the sex difference in implicit sexual attitudes was small. Finally, participants with higher baseline self-perceived mate value reported less sexual openness and implicit preference for progressive over conservative politics than lower mate value participants. Overall, these results agree with previous evidence that men's mating strategies might be more responsive to dating popularity than women's, and that an individual's sex and their mate value significantly affect their socio-political attitudes.

Netflix and chill? Sex differences in (hypothetical) booty-call mate preferences

Evita March¹, Brooke Tassell¹

¹*Federation University*

Trolling is a deliberate and disruptive antisocial online behaviour, where an individual intentionally communicates inflammatory and provocative comments with the intent of eliciting a reaction from other users. Largely, previous research has shown men compared to women are more likely to troll online. However, when exploring trolling behaviours on Location-Based Real-Time Dating apps (LBRTD apps; e.g., Tinder), women were as likely as men to troll. The current study tested the hypothesis that men and women troll on dating apps as a competitive, sexual strategy. Specifically, we explored if intrasex competitiveness mediated the relationship between gender and trolling behaviours on dating apps. Participants (N = 70% women, average age = 22.48 years [SD = 6.04]) completed an online questionnaire comprised of a measure of intrasexual competitiveness and a measure of trolling behaviour on LBRTD apps. The mediation model was tested in three steps: (1) a simple regression showed gender significantly predicted trolling on LBRTD apps, (2) a simple regression showed intrasex competitiveness significantly predicted trolling on LBRTD apps, and (3) a multiple regression showed when gender and intrasex competitiveness were included in the same model, gender was no longer a significant predictor of trolling on LBRTD apps. This mediation was supported with a PROCESS analysis and significant Sobel test ($p < .012$). Results indicated intrasex competitiveness fully mediated the relationship between gender and trolling on LBRTD apps, providing support for the hypothesis that men and women might troll on dating apps as a strategic, competitive behaviour.

Testing the perspective hypothesis: Do height differences affect perceptions of dimorphism, attractiveness, and dominance?

Peter Marshall¹

¹*University of Newcastle*

When people of differing heights interact face-to-face, this height difference creates a perspective difference between them. Shorter people will be looking up, seeing others' jaws as wider, and their faces tapering back towards their forehead. Taller people will be looking down, perceiving others' as having larger eyes, and their faces tapering down towards their chin. The current research aims to test the idea that this effect is related to the sexually dimorphic characteristics of human faces. This is due to the observations that, on average, men are taller than women, that large eyes are considered an attractive feature of female faces, and that wide jaws are considered an attractive feature of male faces. Additionally, human dominance signalling includes the behaviour of tilting (pitching) the head slightly upwards, which protrudes the jaw and exposes the neck. The current research aims to test the idea that part of the reason why this behaviour has been selected is because it gives the appearance that the signaller is taller than they actually are. The current research uses a virtual reality methodology that presents realistic human avatars of differing sexes, heights, and head pitch to the participants; and asks them to make judgements of height, dimorphism, attractiveness, and dominance. The current research is in progress; preliminary results will be presented and discussed.

What do our faces and bodies tell people about us?

Ian Stephen¹

¹Department of Psychology, Macquarie University

People make a large number of spontaneous judgements about people just by looking at their faces and bodies. But how accurate are our judgements? What cues do we use to make the judgements? And can our perceptions be altered? This talk will address these questions by discussing some new and classic studies in the field of face and body perception.

Have we met? Recognising the psychopath's face

Danielle Sulikowski^{1,2}, Julia Mills¹

¹*School of Psychology, Charles Sturt University*

²*Perception and Performance Research Group, Charles Sturt University*

A number of recent studies have suggested that facial morphology may differ systematically with self-reported psychopathic tendencies. While several studies have considered perceivers can accurately detect such cues few have considered the potential selection benefits that could have driven facial morphology and psychopathic personality traits to co-evolve. In the current study we identify and test one potential benefit.