Joshua Harwood
University of Bath

Constantly connected - The effect of smart-device use on mental health

A number of studies have demonstrated the mental health implications of excessive Internet-browsing, gaming, calling, texting, emailing and social networking and yet none have investigated the impact of being able to conduct all of these activities on one device. A smart-device allows these activities to be conducted at anytime and anywhere, with unknown health repercussions. This paper is investigating the association between smart-device use, smart-device involvement and mental health. A cross-sectional survey design was implemented with 5 main sections relating to smart-device use and mental health. 318 surveys were completed. Multiple regression analysis on the data revealed that higher stress and anxiety but not depression were significantly associated with higher smart-device involvement, however neither stress, anxiety nor depression were significantly associated with total smart-device use. It can be concluded that it is the addiction like relationship people have with their smart-devices, not the volume of use, which is predictive of anxiety and stress.

Amanda Hyne
Plymouth University

At Arm's Length: Competing & Complementary Mechanisms

Video stimuli showed an actor presenting objects in a behavioural stimulus-response compatibility paradigm, implicitly measuring the actor's wrist orientation and hand of presentation. A significant difference ($p < .01$) of participant response was found. All participants were right-handed, therefore it is unsurprising that responses with their preferred hand were faster. There was also a significant interaction ($p < .01$) between the actor's arm and participants' hand of response, akin to a spatial Simon effect. Further, there was a significant interaction between block and wrist orientation ($p = .02$) demonstrated slower responses to the vertical wrist orientation in the second block. Possible interpretations of these results are discussed in terms of visual occlusion, kinematics, and affordances, all aspects of spatial negotiation.

Anna Katharina Klohe
Bath

Gelotophobia: A shameful reaction to a merciless use of humour? England and Germany compared.

Gelotophobia is the fear of being laughed at. Gelotophobes respond to situations of laughter not with joy but with increased levels of shame. So far, there are only theories about the origins of gelotophobia and these do not incorporate the cultural

differences in the prevalence rates of gelotophobia found in cross-cultural comparisons. The study therefore aimed at analysing the cultural differences in the use of humour as a possible explanation for the development of gelotophobia, by comparing the state shame reactions of Germans and the English to German and English uses of humour. Results indicate greater shame reactions to the English use of humour, which is in line with the higher prevalence rate of gelotophobia found for English participants. The study has useful implications for future research, demonstrating the value of investigating cultural differences in understanding the origins of gelotophobia.

Chris Attoe
Bath University

Comparing the behavioural and affective elements of body image dissatisfaction in low-weight and target-weight anorectics

Body image (BI) dissatisfaction forms part of the core psychopathology of Anorexia nervosa (AN), as well as being resistant to traditional treatment methods and even contributing to relapse in anorectic patients. Recent research posits a multi-dimensional approach to BI dissatisfaction, with affective, cognitive and behavioural elements. This research aims to investigate this multi-dimensional approach in anorectics at low-weight (below BMI17) and target-weight (above BMI18). Distinctions between anorectics and their BI at different weights have not been made previously in the literature. All participants were given 3 reliable and validated self-report measures to assess affective (anxiety-related) and behavioural components of BI dissatisfaction. Results indicated that although target-weight anorectics had significantly more affective BI concerns than their lower-weight counterparts, there were no significant differences between the two groups in terms of behaviours relating to BI dissatisfaction. These results are consistent with previous studies of BI across different weights in anorectics.

Natasha Bloodworth
Plymouth

Energy Drinks: Does the Placebo Effect Play a Role?

Energy drinks have become increasingly popular, with companies claiming that they can enhance physical and cognitive performance, using stimulants, such as taurine. However, whilst there is evidence that these effects are produced, there is no clear link to the stimulants. Therefore, it could be suggested that the placebo effect may contribute to causing the effects. The present study investigated the placebo effect in this context by assessing the effect that the consumption of a placebo energy drink had on heart rate. The findings demonstrated an increase in heart rate after the consumption of the placebo and a decrease when it was discovered that the drink was a placebo, therefore suggesting that the placebo effect plays at least a contributing role.

Sue Sidey
University of Bath

The ego depleting effects of joint decision making

Research suggests that certain mental activities including decision making and self presentation, a motivation associated with group decision making, draw upon a generalised mental energy resource. Without replenishment a state known as ego-depletion results which is implicated in impaired performance of subsequent mental activities, including the exertion of self control. It was hypothesised that joint decision making would be more depleting than individual decision making. 91 participants were allocated on an opportunity basis to three conditions: control, individual decision making and joint decision making. Participants in the decision making conditions either individually or with another participant made 180 selections of one out of two everyday items, while those in the control condition indicated how often they had used or consumed 180 different everyday items. The dependent variable was the change in the duration of participants' ability to exert self control and keep closed a spring loaded handgrip, as measured before and after the making the choices. Depletion was inferred from performance decrement. ANOVA results showed there was no significant difference between the conditions and the hypothesis was therefore not supported. The handgrip test did not provide a robust measure of self control from which depletion could be inferred.

HUI YEE YEAP
UNIVERSITY OF BRISTOL

How Do Children Develop an Understanding of Pretend Play?

According to Jarrold, Mansergh & Whiting (2010) study, pretend play does not only require a Theory of Mind (ToM) or meta-representational ability (Leslie, 1987), but children's executive function abilities are also crucial predictors of pretence. This is supported by the results shown such that, although autistic children were thought to lack a ToM, they seem to understand a certain extent of pretend play. Moreover, children's level of verbal ability is also highly correlated with their ToM (Carlson, 2001). Therefore, children's level of verbal ability, inhibitory control, working memory and ToM level were assessed in a two 15-minutes sessions experiment to determine the more important predictor of pretend play, specifically in false pretence. 38 3-4 years old children were recruited from nurseries for this study. Although ToM, specifically the classic Sally-Anne task, is found to be the more important predictor of false pretence, there seems to be something more than just ToM that are involved in pretend play. Different types of pretend play seem to require different abilities. Additional replications are required to further determine these various factors of pretend play.

Rebecca MacKechnie
University of Bath

Social Communication and Autistic Triad Trait Patterns in Young Children with Severe Visual Impairment

Severe Visual Impairment (VI) is associated with difficulties in social communication and many children are diagnosed with autism spectrum disorder (ASD) by school age. Recent studies highlight pragmatic language weaknesses in children with VI. There is also theoretical debate concerning the nature and aetiology of ASD in children with VI. Using the Visual Impairment Social communication Schedule (VISS), we examined behavioural profiles of 35 pre-schoolers with VI aged 1.5 to 5 years divided according to 'At Risk' and 'Not at Risk' of ASD criteria. Pre-schoolers 'At Risk for ASD' performed consistently worse, across all triadic areas, in comparison to pre-schoolers 'Not at Risk for ASD'. A main effect for triadic area was also revealed, with both groups showing more impairments in Social Communication relative to Social Interaction and Behaviour domains. It is of particular interest that social communication appears to be particularly vulnerable, highlighting the need for early social-communicative intervention in infants with VI.

Katherine Wood
University of Bath

Theory of Mind and Anxiety: Their relationship in children and adolescents with autism

Research suggests children at the higher functioning end of the autistic spectrum are more likely to suffer from anxiety disorders. Within autism spectrum disorders (ASD), higher functioning children also tend to have greater understanding of other's mental states ('Theory of Mind'). This study investigates whether theory of mind is related to anxiety in participants with ASD (n=32), and how this compares to children and adolescents without autism (n=24). It was found that symptoms of obsessive compulsive disorder (OCD) are significantly related to theory of mind in participants with ASD, but not in participants without ASD. Different patterns of relationships were found between anxiety and theory of mind when groups were subdivided by clinical levels of anxiety. These findings were not replicated in the non-ASD sample. Evidence for an obsessive-compulsive subtype of ASD is discussed, as well as the importance of distinguishing between ASD- and OCD-related repetitive symptoms.

Jodie Nicholls
Plymouth University

Detection of Abnormalities in Synthetic Mammogram Backgrounds

Symmetry is thought to be a robust detection mechanism however there are well known problems with symmetry perception. This study uses a synthetic lesion placed on synthetic mammogram backgrounds to compare detection for mirrored and non-mirrored conditions. It also compares these to a new condition called 'flicker'. Results show that there is no difference between detection performance for mirrored and non-mirrored conditions but that flicker reduced detection threshold, especially when the images were similar.

David Martin
University of Bath

Protests through the eyes of a police officer: Police accounts of the 2010 London student protests

This research takes as its context a series of four student protests which took place in London during November and December 2010 prior to, and on the day of, the government vote on increasing university tuition fees. Through interviews with Metropolitan Police Service officers, this research aimed to establish an understanding of how police officers interact with, conceptualise and experience crowds and to integrate this with current academic theory. The behaviours of the police and of protestors were found to impact upon the other group's decision making not just during individual protests but over the whole protest period. Additionally, police talked of the crowd as containing different types of people with different agendas and focussed in particular on those they saw as attending the protests intent on causing violence. Support was shown for the tactic of containment (kettling) although there was recognition that it could increase tension. Generally, police decision making and conceptualisation of the crowd was found to have moved forward with developments in crowd psychology literature although room for change in certain areas remains.

Madeleine Ball, Debbie White, Caroline Hawkins, & Lottie Sawyer
Plymouth University

Personality, Mood and Characterisation in Drawing

Recent work by Picard & Lebaz (2010) has suggested that mood may be inferred by symbolic characteristics (such as size and colour) in freehand drawings of everyday objects such as trees. Our current study aimed to examine an adult population and take personality into account. We were interested to see the relationship between personality and mood and size and colour variation in drawings of emotionally characterised objects. 148 stage 1 undergraduate psychology students from Plymouth University each completed 3 drawings (baseline, happy and sad) of either a man or tree. Following this they completed two standardised personality and mood

measures; BFI 44 and DASS. Results supported the findings of Picard and Lebaz (2010) with regards to the tree condition. On average the happy drawings were significantly larger than the baseline drawings and the sad were significantly smaller. The happy man drawings were significantly bigger than the baseline while the sad were not significantly smaller. Colour, mood and personality are yet to be analysed.

Kate Telford
The University of Bath

Money Business: examining attitudes towards and relationships with money and the role of emotional intelligence

The current study examines people's attitudes and behaviours towards money (Money Beliefs and Behaviours Scale, MBBS) and whether demographic variables and emotional intelligence (TEIQue) play a role. Questionnaires were completed by an opportunity sample of over 300 students in their first year of attendance at either University College London (UCL) or Middlesex University (MU). MANOVA indicated no significant demographic differences between scores on MBBS facets. Standard multiple regression provided a significant result, $F (10, 191) = 8.18$, $R^2 = .30$, $p<.0001$; hence about a third of the variance in trait emotional intelligence was explained by gender, age, religiousness, political orientation and the six money facets. Standardised regression coefficients indicated that the money beliefs and behaviour factors of Security and Obsession were particularly important; with Security predicting high emotional intelligence and Obsession predicting low emotional intelligence. It is concluded that emotional intelligence can, in part, be predicted by an individuals' own beliefs and behaviours towards money, particularly those who endorse Security and Obsession money traits.

Jo Fearon
Bath Spa University

Are People Like Their Pets? A Study into Dog Ownership and Personality

Owners and their dogs share close bonds and similarities between them have previously been linked to physical appearance. With selection pressures creating numerous separate breeds with distinct morphology and behavioural traits this study aimed to discover if human personality could be linked to ownership status. A questionnaire obtained data from a 50 item personality scale adapted from Goldberg's (1992) big five personality markers and information on dog ownership. MANOVAs were used to analyse the data from 50 dog owning and 50 non dog owning undergraduates. No significant difference was found between dog owners and non-dog owners in terms of overall personality. Extraversion was found to differ significantly between owners of different breed groups. Terrier owners extraversion scores differed significantly from Pastoral dog owners, with Terrier owners being less extrovert. The results suggest that while there are some differences between the

personalities of owners of different breeds groups of dog it is not yet possible to create personality profiles that exclusively match owners of each breed or predict dog ownership status based on the results of this personality test.

Lukasz Sloma
University of Plymouth

Mirror Neurons, Emotions and Imitation – Mimicry of Facial Micro-expressions

This study examined involvement of Mirror Neurons (MNs) in imitation of Rapid Facial Expressions (RFEs). Level of imitation was measured with Electromyography (EMG) on Brows (corrugator supercilli) and Cheeks (zygomaticus major) of 37 University of Plymouth students. Participants watched 120 facial expressions, chosen from IAPS, and categorized seen emotion, with a button press, as positive, negative or neutral. As predicted, mimicry of facial micro-expressions has been detected, what suggests involvement of mirror systems in imitation of emotions. The effect was stronger for pictures producing smile, this could point to human preference for positive emotions. There was no difference between genders in distinguishing task, however all participants were significantly worse at recognizing negative emotions. No effect between distinguishing task scores and strength of imitation has been found.

Laura Read & Jenny Netherton
University of Plymouth

The effect of agency on the distribution of glow sticks in children

In recent research, agency was found to be a contributing factor when adult participants were asked to distribute money to an anonymous other (Choshen-Hillel & Yaniv, 2011). The study presented shortly extends research, investigating the effects agency has on children of different ages. Children were allocated to a low or high agency condition and were asked to distribute glow sticks to an anonymous other; equality was used if they preferred to distribute two glow sticks and social welfare was used if they preferred to distribute four glow sticks. Results showed agency had a significant effect on individuals' decisions, $X2(1, n=76) = 14.19$, p[.05. Age and gender were also considered, with literature evaluated in relation to child development and prosocial behaviour.

Liz Potter
University of Bristol

Examining the Effects of Noise And Cognitive Load on Speech Recognition

Speech recognition is affected by perceptual and cognitive load (CL). The current study used speech-in-noise to represent perceptual load (No-Noise vs. Noise). CL comprised two levels of a visual search task (Low-CL vs. High-CL). The present study extended the design of previous research conducted by Mattys & Wiget (2011), using lexical and non-lexical stimuli in a phoneme categorisation test and a test of perceptual discrimination. This tested reliance on lexical and sub-lexical cues when presented with stimuli in adverse conditions. The findings did not replicate a CL-induced lexical drift, although they did imply a trend in this direction. Discrimination of speech-in-noise was not possible, and this was reflected in an impaired ability to make lexically-consistent judgements in the categorisation test. When confronted with both loads, there was a general decline in speech recognition, which is consistent with previous findings. Limitations and modifications are considered as the design of this experiment has the potential to generate findings with practical applications.

Charlotte Rishworth
University of Plymouth

Relations To and With Other Social Groups

The purpose of this study is to investigate people's attitudes toward social groups, specifically looking at which social policies (i.e. color-blindness, multi-culturalism, and omni-culturalism) have the biggest impact on reducing the effects of prejudice (e.g. self-esteem) for minority groups in comparison to a control condition.

Blaize Dymond
University of Plymouth

The use of errorless learning in the rehabilitation of action disorganisation syndrome

This study investigates the use of errorless learning in the rehabilitation of action disorganisation syndrome. Case DL was an inpatient at Frenchay Brain Injury Rehabilitation Centre and suffered a traumatic brain injury in 2010. DL presents with a high level of disorganisation when engaging in sequential tasks. Errorless learning was used in an attempt to rehabilitate abilities in two everyday routine sequential actions; making a cup of tea and making toast with butter and jam. Errorless learning involves the deliberate prevention of any errors using both verbal and physical prompts. The intervention resulted in a significant decline in the numbers of errors made in both tasks, showing errorless learning as an effective method for rehabilitation in everyday action.

Emily Collins Emily Collins
Bristol

Extracting the Mean Emotion across variations in Expression and Gender

A huge part of human interaction and communication arises from the ability to perceive others and our external environment. In essence the visual system must critically differentiate what aspects of the world are important to represent. Research (Ariely, 2001) argues that our visual system calculates statistical summaries based on groups of similar objects. Instead of processing each and every item, our visual system computes the mean of all items into a single statistic. While this was previously thought to be the case with only low-level stimuli, recent reports (Haberman & Whitney, 2007) have found this mechanism to function with high-level stimuli including faces. This experiment applied a similar paradigm as Haberman & Whitney, (2007) and assessed observers' ability to extract the mean emotion (either happy or sad) across a set of faces, varying in expression and gender. Results showed a significant effect for expression but not for gender, indicating that observers' precision in extracting the mean emotion was more affected when facial expressions across a set varied considerably.

Sarah-Jane Baugh
University of Plymouth

The Effects of Gardening on Chocolate Craving

Two concepts, craving and nature, were brought together to investigate the effects of a natural, concurrent task on craving. The main hypothesis of Elaborated Intrusion theory is that imagery plays a key role in craving using resources in the visuo-spatial sketchpad (VSSP). Therefore, loading the VSSP with a concurrent task should interfere with craving imagery and hence reduce craving. According to Attentional Restoration theory there are characteristics in nature that can restore attentional components thus gardening was utilised as a novel, concurrent task. Exploratory research was conducted to see whether there would be any additional effects such as attentional, mood and physiological improvements. Participants completed a chocolate induction to induce craving before taking part in one of three 5 minute tasks (gardening, plasticine modelling, counting). Measures of Craving, mood, attention and heart rate were recorded. Energetic arousal and feeling good were significantly increased in the garden condition indicating that a natural task is beneficial; however, no significant effects were found for craving or attention.

Sophie Augarde
University of Plymouth

The effect of inter-group disgust sensitivity and contact on attitudes towards burqas

Intergroup disgust (ITGD) sensitivity is a construct reflecting individual differences in the tendency to experience disgust and revulsion towards ethnic outgroups. It was predicted that people who were high in ITGD sensitivity would report greater

prejudicial attitudes towards women wearing burqas. Types of contact (no contact, imagined contact and elaborated physical contact) between participants and an outgroup member were investigated to assess the efficacy of reducing prejudice towards women who wear burqas. ITGD sensitivity along with attitude towards burqas was measured over two sessions. Results indicated that there was no statistically significant effect of ITGD sensitivity or contact type on attitudes towards burqas. However mean scores indicated that people who were low in ITGD sensitivity reported less prejudiced attitudes towards burqas as the level of contact increased with the outgroup member. The opposite effect was seen in the main means for those who were high in ITGD sensitivity; prejudiced attitudes towards burqas increased along with the level of contact. It seems that the expected prediction of increased contact with outgroup members reducing prejudiced attitudes was met only with people who are low in ITGD sensitivity. The results indicate that there is some initial evidence suggesting an interaction between ITGD sensitivity and contact to predict prejudicial attitudes.

Stuart Smith
University of Exeter

Reeling in the BAS: The initial development of quick behaviour based interventions for reducing approach motivation during the onset of manic episodes.

This study aims to provide a starting point for developing easy-to-use interventions that attempt to reduce Behavioural Activation System (BAS) activity for use in the prevention of manic episodes. The intervention was based on predictions made by BAS dysregulation theory of bipolar depression and Polyvagal theory. The former approach proposes that manic episodes start with excessive activation of the BAS, whilst the latter suggests that BAS activity can be reduced by inducing parasympathetic activity via the Social engagement System (SES). Fifty Five members of the University Community took part in a lab based study in which they were randomly assigned into an intervention condition or one of two control conditions. In the study all participants engaged in a BAS induction task and then did the intervention, an active control, or a passive control task. We expect that BAS should become active across all participants after the induction task and then vary in how quickly it returns to baseline as a function of experimental condition. We found that all participants had an increase in approach motivation after the BAS induction but we did not find any reliable differences between the groups. Possible explanations include the impact of low accuracy on the task in the active control, and the task demands inherent in the neutral control condition.

Elle Williams -
University of the West of England

'I am not a gym monkey': Male weight trainers perceptions of appearance and muscularity enhancement behaviors. A Qualitative study

Past research has shown negative effects of intense weight training when done for appearance reasons, potentially leading to muscle dysmorphia. This qualitative study aims to understand weight trainers perceptions of appearance and motivations to train. Seven male weight trainers who trained four or more times a week and who have engaged in the sport for more than four years took part in semi structured interviews. These were then transcribed and analysed in Nvivo using thematic analysis. Results identified five core themes: (a) is it all about appearance? (b) experience is king, (c) no pain no gain, (d) to protein or not to protein, & (e) we want to be natural, we want to be balanced. These themes describe the positive effects of weight training in these males. A preoccupation with appearance leading to extreme exercise in past research has been seen as negative however this research provides evidence to suggest that some men are able to exercise safely within the physiological boundaries which their body can achieve, whist striving to create the cultural ideal of being lean, muscular and healthy. The findings describe how the training enhanced their lives and is not detrimental to other aspects of their lives, i.e. work and social life. The participants wanted to look 'better than the average male' but did not aim to look 'unnatural' and 'hyper muscular'. Being healthy and having a balance between the gym and other areas of life was exceedingly important. These findings propose that a healthy preoccupation with appearance may be possible, leading to an enhanced and happy life in weight training males.

Christopher Cribbett, Anna Nogueira Nicolau, & Rebecca Uren
Plymouth

The Relationship between Counterfactual Reasoning and the Attribution of Emotions in children

Previous research on the happy victimiser paradigm has been unable to explain the developmental shift between positive and negative emotional attribution around the age of six. Based on only one study by Gummerum (2010), this study predicted that a child's ability to use counterfactual reasoning (the process of imagining alternatives to reality) will have a direct effect on emotional attribution to the victimiser of a moral transgression. One hundred and thirty six children aged 4 and 8 years were presented with a Counterfactual reasoning task and the Happy Victimiser task. Younger children attributed significantly more negative emotions when asked about the feelings of the victim before the feelings of the victimizer. A regression analysis showed that counterfactual reasoning was the main predicator for negative emotional attribution.

Richard Daws
Bristol, UWE.

Yawn! This is boring: To what extent does contagious yawning affect group problem solving.

Yawning is often viewed as a biological process that enhances blood oxygenation. This hypothesis has proven difficult to support. Recent support for psychological theories that describe yawning as a social phenomenon has been mixed. The present study aims to explore the social communication hypothesis of yawning (Guggisberg et al., 2010), by observing the effect of yawn stimuli on group performance within a creative problem solving task (the marshmallow challenge). A fully between subjects one way ANOVA was conducted and found insignificant effects of yawning on participant's performance within the task. Analysis also found that groups performed significantly better than individuals. Speculations for the absence of yawn contagion and the advantage of greater group size within this study are discussed.

Chris Payne
The University of the West of England

Why are study groups important? The performance and motivational impact of talking to someone when studying.

Private speech and self explanation have been found to enhance task performance in children and adults, when faced with certain tasks. Moreover, one mediating variable for the performance gain is hypothesised to be that of motivation. The aims of this study was to test students to see if private speech or self explanation would help them to achieve higher results in a test, if they were motivated to study for longer periods when talking or if they reported a greater motivation for the study in a post test standardised measure. n=79 participants were required to study a set of 'fact sheets' and whenever they felt they were ready, independently, they could then stop studying and take a multiple choice test. Results have suggested a significant difference between those who study alone and those who study in pairs, where pairs who were either discussing or not discussing the study material scored significantly lower on the post study multiple choice test. Those in conditions where they were to talk, showed an increase in study time, even when the timed talking periods were removed, yet did not report higher motivation on the post test motivation questionnaire.

Catherine Piper
Bath

Examining Attrition in Crime Investigations Involving Victims with Mental Impairment

The term 'attrition' refers to the dropout of cases at various stages of the criminal justice system. A small body of research suggests that attrition is higher in cases involving victims with mental health issues or learning difficulties than in those involving non impaired victims. Speculative literature suggests that mentally impaired victims face innumerable barriers to justice, including presumed lack of credibility

and poor mental health awareness in police officers. This study aimed to examine and compare attrition prior to court in cases involving mentally impaired and non impaired victims, and to identify barriers to justice for impaired victims.

Police case file analysis showed a significant association between victim mental health condition and case attrition prior to court. In addition, an association was found between level of victim care and point of case attrition. Semi-structured interviews with specialists within the criminal justice system then identified mistrust, inadequate police training and poor victim advocacy as key barriers to justice for impaired victims. These findings suggest a justice gap for mentally impaired victims, which could feasibly be reduced through relatively simple measures.

Anna Risswig
University of West of England

The impact of facial feedback on global and local attention

This study aims to investigate the impact of emotional facial expressions on the focus of attention. Previous research in the field has suggested that negative emotional states are linked to local and focused attention, while positive emotional states can facilitate a more global focus (Gasoer and Clore, 2002). In relation to Niedenthal's (2007) proposal of emotion concepts, the study will draw on research from the embodied cognition approaches.

Olivia Matthews
University of Bristol

Low contrast random internal motion significantly increases perceived velocity

The influence of random internal motion on perceived velocity was investigated. A temporal 2AFC paradigm was utilised to measure the PSE of velocity for nine experimental stimuli. Participants determined whether the comparison stimulus (1-D horizontal Gaussian) or the experimental stimulus (a rectangle displaying static or dynamic, vertical sinusoidal gratings) moved faster. Dynamic gratings could move 'with' or 'against' the direction of rectangle motion, translate randomly, or oscillate (counterphase). Experimental stimuli were displayed at 50% contrast in one condition (excluding counterphase) and 100% in a second condition. One-tailed within-subject t-Tests compared mean PSEs of stimuli with dynamic gratings to stimuli with static gratings (baseline). At both contrasts, 'with' and 'against' internal motion significantly increased and decreased perceived velocity, respectively. 'Random' internal motion (at 50% contrast) and 'counterphase' significantly increased perceived velocity also. One-tailed within-subject t-Tests revealed that an increase in contrast did not significantly increase perceived velocity. The influence of random motion was explained by the employment of long-range processing at low temporal-frequency and short-range processing at high contrast.

Sharon Cheung
University of Bristol

Function Overriding vs Idea Generation: Which is harder in Pretend Play?

Under the executive function account, pretence depended on the person's ability to manipulate and regulate actions. This study examined whether object substitution is harder than attribution of imagined properties in pretence due to different executive functioning demands. Thirty typically-developing children aged 3.5–4.5 years were engaged in two pretend play conditions, employing counter-functional props (CF) and non-functional (NF) props. Measures of Theory of Mind, executive functions (working memory and conflict inhibition) and non-verbal intelligence were also administered to reveal their relative contributions to pretence performance. Results showed the total number of pretend acts generated in the NF condition (total NF) outstripped that in the CF condition significantly. Multiple regressions revealed conflict inhibition remained to significantly predict the performance in CF condition over and above theory of mind, working memory and intelligence when total NF was controlled for. It was argued that concurrent demand of inhibition and generation of ideas was the key determinant of object substitution. Implications in pretence difficulty in autism were discussed.

Georgia Samwell
University of Bristol

Weighted perception: The effect of disease salience on the perception of body weight

It has been found previously that humans associate obesity with disease. While behavioural and cognitive disease avoidance responses have been shown, little research has been conducted on the influence of disease avoidance on perception. This study uses a weight judgement task to investigate the link between disease avoidance and the perception of body weight. Disease salience was manipulated via a poster rating task relating to either danger (control) or disease (independent variable). It was hypothesised that higher disease salience would result in lower, more conservative, upper body limit ratings. No direct support for the hypothesis was found. However, there was a significant interaction between condition and perceived infectability on upper body weight ratings, providing partial support for the hypothesis. Perceived infectability was found to moderate the effect of disease salience on perception. Findings suggest a disease avoidance influence in the perception of obesity, with higher disease threat resulting in more conservative body weight judgements. This has implications for the factors underlying the stigmatization of obese people.

James Manthorp

Plymouth University

Does the increase of biodiversity in a single aquatic display at the National Marine Aquarium in Plymouth affect individual's time management at various additional displays?

Natural environments have been found to have an effect on restoration and perceived restoration in individuals. This experiment focuses on if perceived restoration is linked to the levels of biodiversity in the present environment. This study is an observation of time management displayed by the general public visiting the National Marine Aquarium in Plymouth at three different displays over several sampling periods coinciding with the progressive increase in biodiversity in the Vacant Display. The results analyse if participants time management changes over the three sampling periods as a result of the changing levels of biodiversity at the Eddystone Tank. Preliminary results from an investigation of time management & biodiversity at the Plymouth national marine aquarium resulted in data suggesting that different sized groups allocate their time at the aquarium differently. Evidence suggests larger groups spend their time in proximity to a single large windowed tank and smaller groups spend their time in a multiple tank rock pool zone.

Carrie Stewart
University of Bath

An exploratory study into the relationship between resiliencies and clinical symptoms in at-risk adolescents

Despite the extreme difficulties associated with mental health disorders, and their increased prevalence in disadvantaged individuals and communities, some individuals appear resilient. This study aims to explore the relationship between internal resiliences and clinical symptoms to better understand the complex psychological etiology of mental disorders. A total of 539 participants where part of this study, all attended urban middle schools in northern America, with an age range of 11-15. Data was collected using a self-report questionnaire, which produced information on the respondent's relationships, character traits, development and levels of clinical symptoms. Canonical correlation analysis revealed several important links between resiliences and clinical symptoms, outlining the complex multifactoral interaction between an individuals protective and risk factors. Links where found for emotional symptoms, aggressive behaviors, ADHD behaviors and peer problems. The findings create a strong basis to firstly understand the individual factor relating to the development of mental disorders, and secondly to identify potential warning signs.

Eleanor Gray
University of Bristol

Are Mental and Physical Illnesses Psychologically Separated?

Previous research has found that people suffering from illnesses, both physical and mental, are stigmatised. Despite there being a distinction made between physical and mental illness in the literature and everyday life, the question of whether they are psychologically separate has never been studied. This study predicts that mental and physical illnesses will be psychologically separate due to the commonality of the distinction and the severity of mental illness stigma. Using the memory confusion paradigm participants were presented with targets of their own gender, randomly matched to sentences depicting an illness (either physical or mental) and neutral sentences. The errors made in matching were analysed. Paired samples t-tests showed that people do not psychologically separate mental and physical illnesses, but that people suffering from mental illnesses were significantly more memorable as individuals. These findings are discussed in the light of previous research and the significance for understanding mental illness stigma is noted. Limitations of this study are discussed and initiate ideas for specific future directions.

Leo Shi
University of Bristol

<No title>

Both game addiction and internet addiction disorder have been identified to manifest physical and psychological characteristics resemble in substance abuse individuals. The literature provides evidence that both addictions have universal pathological effects on addicted individuals across cultures. Previous studies have suggested that personality traits including impulsivity play a role in the development of both addictions. The current experiment aims to investigate the relationship between game addiction and internet addiction, and how they interrelate to personality traits using three questionnaires. Eight-three participants (41 male, M age = 21) complete take part in the study. After preliminary analysis of the results, sixteen of those are selected to attend a laboratory experiment that measures impulsivity. The findings show significant positive correlations between game addiction and internet addiction, and between internet addiction and openness, extraversion. Findings also display a significant negative correlation between internet addiction and neuroticism. Further implications of the results are discussed in relations to previous findings.

YIREN SUN
BRISTOL UNIVERSITY

Temporal and positional factors in probe grouping recall

Previous findings suggested participants leave a pause between groups when attempting serial recall. The result indicated the time cost to access items in a hierarchical list representation with multidimensional cues, temporal and positional.

With criticism arguing the grouping phenomenon suggested by serial recall were spontaneously produced, and has a lack of consistency. Therefore in this present experiment, we employed two pre-grouped stimuli experiments and employed probe recall to control the examination for the influence of both temporal and positional factor. Two different designs were employed in the experiments. In experiment one, stimuli were presented visually and in experiment two, stimuli were presented in auditory forms. We found both results supported time cost to retrieve across longer space. Furthermore experiment 2 found the significant grouping effect at delaying the responding time. Both experiments point to a tight linkage to the previous theory which supported the multidimensional structure of short term memory. The outcome also suggested both temporal and positional cues were crucial to the retrieval process in the output structure.

Maya Verlander & Amber Simler
University of Plymouth

Mental Imagery and Emotional Responsiveness: The Influence of Visual Vividness

The relationship between change in mood and vividness of visual imagery was examined in two studies. Both studies aimed to elucidate how individual differences in vividness of visual imagery might influence emotional responsiveness. Undergraduate participants completed mood questionnaires before and after an imagery task that required generation and inspection of mental imagery determined by 50 auditory scripts describing negative (study 1) or positive (study 2) scenarios. Study 1 found a strong, positive correlation between Vividness of Visual Imagery (VVIQ) scores and increase in state anxiety (STAI-S) following negative imagery. A physiological measure, heart rate, also correlated with vividness of visual imagery, but dissociation tendency (DES-C) did not. In study 2, imagining the positive scripts led to an increase in positive mood (PANAS) and a reduction in anxiety (STAI-S), but these changes did not correlate with vividness of visual imagery (VVIQ) scores. The findings suggest a particularly close relationship between imagery and emotion; in particular negative more than positive. Individuals who experience very vivid mental imagery are also therefore able to imagine themselves into a state of increased anxiety.

Charlie de Montfort
University of Bristol

Investigating the effect of Ramp Gradients on Speed Perception

Movement is considered a hindrance for attempted camouflage with most attempts at concealment being disrupted by any motion from the target object. Rather than attempting to disguise ships using techniques of masquerade and mimicry, navies in both WWI and WWII painted their warships with high contrast "dazzle camouflage" patterns. By doing so it is claimed that the patterning disrupts the perception of factors such as range, heading, size, shape and speed. This inhibition of perception

induced by the dazzle pattern work is advantageous for moving military apparatus on both land and sea with the avoidance of attack from RPGs and Torpedos. Similar benefits for both predators and prey are seen in biological environments. This study investigates how variants of dazzle camouflage involving ramp texture gradients influence the perception of speed. A leading black edge tailing off to near mean background luminance was found to influence the perception of speed at an increase of 9%. Implications of this finding are discussed accordingly.

Matthew Roche-Saunders & Laura Heywood
University of Exeter

Temporal focus and negative life events: how the future can free us from the past.

Previous research on temporal focus has shown that directing our attention towards the future is more optimistic and liberating than past-focused rumination, with particular relevance to negative life events. The current research investigated the interaction between temporal focus and the participant's role within a negative event as either a victim or a perpetrator. Participants were given a scenario in which they had the role of either victim or perpetrator, and they responded in terms of their emotions, intentions to seek reparation, and their compensatory behaviour. It was hypothesised that participants with a future focus in both perpetrator and victim conditions would produce a more active, idealistic response, with perpetrator participants showing greater willingness to apologise for their offence and to offer compensation, and victim participants showing less negative emotions and a greater willingness to forgive and forget. Results were in line with the hypotheses, with participants in the perpetrator condition showing a significantly greater willingness to apologise for their offence when focused on the future than in the past. Participants in the victim condition showed a similar, non-significant trend, with less vulnerable emotions, more forgiveness and less desire for compensation when focused on the future than on the past. The results are discussed in terms of the future offering an opportunity to enact our ideal self and actively distance ourselves from a negative self-image.

Stephanie Barningham
University of Bristol

The effect of glucose administration on recall and recognition memory for emotional words.

Few studies have linked the 'glucose memory facilitation effect' with emotional material. Consequently, this two-part study investigated recall and recognition memory for words (of positive, neutral and negative valence) in 60 young adults following a glucose or placebo drink. It was predicted that memory would be greater for emotional material and glucose would enhance this effect. However, glucose administration did not lead to enhanced memory for words nor was there an advantage for emotional material. In fact for recall, there was a mnemonic advantage

for neutral words during initial learning and after one weeks forgetting. Valence did not influence recognition responses; however, participants' were more biased towards negative words and poorer at discriminating the target negative words from the distracter words during recognition. Implications of this study provide support that glucose does not further enhance memory for emotional material. Nevertheless, further research should examine this effect by manipulating both arousal and valence of words to gain a more comprehensive understanding of the relative contributions of each in memory.

Joe Simmonds
University of Bath

Factors that impact on prisoners' feelings of safety within English and Welsh Prisons

While some may assume that prisons are unsafe places, research conducted within prisons suggests otherwise. This study looks at the issue of prisoner safety; using data from Her Majesty's Inspectorate of Prisons the question of whether prisoners' feel safe is explored. Factors that influence feelings of safety will be identified and explored, leading to a model being formed which highlights both the importance of factors such as victimisation as well as demographic issues such as ethnicity and religion.

Note. While data from the HMIP is used the research and conclusions are my own

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Stephanie Georgiou & Alyson Bessell
Plymouth

Self esteem, depression, body image and anxiety – the cognitive triad of difficulties

This study will look at the levels of self esteem in a number of individuals. The aim of the study is to develop a conclusion about the link between self esteem and body image and whether low self esteem is correlated with depression and anxiety.

Matt Brandon, Marcus Munafo, & Angela Attwood
University of Bristol

Effects of nicotinised and denicotinised cigarettes upon emotional processing in light smokers.

Receiving a denicotinised cigarette under the pretence that it actually contains nicotine has been found to produce similar behaviours to actual nicotine intake. The maintenance of smoking behaviour is thought to be governed by nicotine's ability to

enhance the rewarding properties of external stimuli. A balanced-placebo design was utilised to test the categorisation of socially relevant facial expressions, with the hypothesis that expecting to receive nicotine would elicit similar results to the actual intake of nicotine. Participants were required to correctly identify a shape after its appearance behind a briefly presented happy, sad or neutral face, after being exposed to the relevant balanced placebo manipulation. An interaction between cigarette, instruction and the validity of the cues was produced. Whereby, both expecting to receive nicotine and actually receiving nicotine produced significantly faster responses towards valid and invalid cues. These findings indicate an interaction between pharmacological and nonpharmacological factors in the maintenance of smoking behaviour. Further studies should look at conducting a similar study in a more socially relevant setting.

Leah Dalling
Plymouth

Islamophobia following 9/11: The Role of Emotions and Right Wing Authoritarianism

Recent polls (Gallup, 2010; The Guardian, 2006; The National, 2011) have indicated a sharp rise in Islamophobia following 9/11. The present study examined factors involved in Islamophobia. An experimental design manipulated participants (n=114) negative emotions through 9/11 footage to establish if emotions mediated Islamophobia. In addition, participants were measured on right wing authoritarianism to examine the moderating effects it had on Islamophobia. Overall, results revealed a relationship between negative emotions and Islamophobia, and importantly that Islamophobia was moderated by RWA. In line Duckitt and Sibley (2009), findings revealed that high RWA participants were differentially sensitive to the 9/11 footage. Implications consider how positive emotions could reduce prejudice through education and how understanding emotions and RWA could inform policy making.

Amy Brayley & Becky McCairns
Plymouth University

Behavioural Responses and Event-Related Brain Potentials during a Concealed Information Test

This research was based on a previous study by Gamer and Berti (2010) and used an EEG procedure to record subjects P300 and N200 responses as well as their response times, during a Concealed Information Test. All subjects completed a control task where they were presented with a number of pictures of playing cards and they had to simply press a button each time they saw a card. Participants were then placed in one of two conditions either the deceptive or target. Within the target condition the participant was instructed to press the 'yes' response button when the Target card was on the screen and the 'no' button for all other irrelevant cards. The deceptive condition also included the irrelevant and target cards but introduced a probe card whereby participants had to act deceptively and deny having previously

seen the card when it appeared. Gamer and Berti claimed that the N200 would be high during the deceptive condition due to participants concealing their knowledge of the probe card however, we believe that the target condition will also produce a high N200 despite participants not being told to conceal their knowledge of the card. Additionally we expected that throughout all three conditions the face cards (King, Queen and Jack) will have longer reaction times and higher P300 responses with the deception condition producing the largest responses. We believe these cards elicit higher responses as they are perceptually different to the non-picture (irrelevant) cards.

Joseph Lythgoe
University of Bristol

Face the Facts: Is the Semantic Differential a Product of Reward History

In an extension of research demonstrating causal effects of reward history in forming the semantic differential, the present study look at using a more emotionally salient stimulus, faces, to investigate whether this is universal. Participants interacted with faces with different rewarding histories, positive, negative and neutral, and rated them on 9 scales. Positive rewarding histories responded more often with 'happy' faces, and negative rewarding histories responded more often with 'angry' faces. Components roughly corresponding to the first two scales on the semantic differential, "Potency" and "Evaluation" were found in male faces and "Evaluation" in female faces. These components were not altered across reward conditions. The research suggests that the semantic differential is not just a result of reward history.

Thomas Davis
University of Bristol

Aggregations of Protean Prey Escape: Countershading confuses a predator's visual tracking during attack.

Some animals have evolved patterns of coloration to avoid detection through background matching. Movement breaks this camouflage. It is hypothesized that prey species for whom movement or conspicuous behavior is necessary may have evolved at least three methods of enhancing predator confusion during escape. This is tested using artificial prey in a computer tracking task. Firstly, large aggregations of prey-like stimuli are found to reproduce the established confusion effect based on group size. Secondly, protean behavior confuses predators and the tracking error associated with this effect is enhanced as group size increases. Thirdly, countershading is tentatively proposed as a coloration pattern that might disrupt tracking of prey during escape. One of the possible functions of the pattern is to act as a compromise, providing the cryptic benefits of a stationary background matching coloration and the benefits to escape afforded by dazzle camouflage during motion.

Victoria Helsby
University of Bristol

Coming to the surface: emotional externalisation and associated catharsis as the process underlying multiple tattoo acquisition

Despite the widening demographic and increasing incidence of tattooing in Western societies, psychological research has ruminated on explanations of tattooing as pathological behaviour. The present study aims to address the disparity between these psychological explanations and the widespread incidence of tattooing. The study used a qualitative method to explore why a person chooses to continue to be tattooed after their first tattoo, and the possibility a common motivation may underlie multiple tattoo acquisition. In-depth interviews with 6 females aged between 20-27, all with two or more tattoos, were carried out. Interpretative Phenomenological Analysis found two super-ordinate themes that captured the women's motivations for multiple tattoos: 'The importance of representing experience and associated emotions' and 'The role of body image and confidence'. The role of body image and confidence are suggested to be contributing factors to the desire to be tattooed again. Multiple tattoo acquisition is proposed to be underlain by the desire to externalise emotion and experience associated catharsis. Thus, for the women in this sample, tattooing is proposed to function as a form of psychological release – a characterisation not acknowledged in the existing literature.

Sally Jennings
University of Bristol

The effects of glucose on the processes underlying episodic, spatial memory.

Glucose enhances hippocampal functions such as supporting episodic, spatial memory. The glucose facilitation effect is usually investigated upon long-term memory (LTM) as a single unit. The present investigation aims to fractionate the effect by the underlying processes of LTM. The administration of glucose pre-learning assesses facilitation at encoding, post-learning investigates consolidation and pre-retrieval localises the effect on recall. The LTM-task used to assess the underlying processes involves learning the locations and colours of shapes within a grid. The grid is successfully recalled by binding within-objects (colour-shapes) and between-objects (colour-shape-locations). The hippocampus is also proposed to mediate binding processes. Participants administered glucose pre-learning had enhanced recall of colour-shapes when they received glucose relative to placebo at retrieval. This suggests an encoding-retrieval overlap. The colour-shapes used in the LTM-task were used in a subsequent short-term memory (STM) task. Colour-shapes were well-recalled across groups. Participants administered glucose had enhanced memory for locations and better performance under low-load relative to placebo-drinkers. This suggests bindings linger and can proactively facilitate or interfere.

Ffion Evans
Bristol University

Do individual differences in perceptual discrimination mediate a link between central coherence and theory-of-mind in typical development?

It has been suggested that two characteristic aspects of the psychological profile of autism, theory-of-mind deficits and weak central coherence, might be functionally related in developing populations. Mechanisms underlying this link are poorly understood. Recently, it has been suggested that enhanced perceptual discrimination underlies WCC effects in autism and in typical development (albeit at the level of individual differences), leading to speculations that this might mediate an apparent link with theory of mind. To investigate, the current experiment looked at interrelationships in performance on an embedded figures task, a hard feature search task, and a battery of theory-of-mind tasks in a sample of typically developing 4-5 year-olds. Performance on the embedded figures task and feature search task were found to correlate, indicating that these tasks recruit a common mechanism, consistent with the notion that enhanced discrimination might underlie the superior performance seen in autism. Neither performance on the feature search nor embedded figures tasks were found to correlate with theory-of-mind score. This not only failed to uncover a link between perceptual discrimination and theory-of-mind, but a more fundamental link between weak central coherence and theory-of-mind, reflecting the contradictory findings that characterise the current literature.

Clare Purkiss
Plymouth University

The Effect of Contact and Perceived Vulnerability to Disease on Attitudes Towards Homosexual Men.

Physical contact and low perceived vulnerability to disease (PVD) was hypothesized as the most successful at reducing attitudes towards homosexual men compared to the control, imagined contact condition and high PVD. 45 University community participants participated. Attitudes towards homosexual men were measured using the Attitudes Towards Gay Men scale. There were three conditions and two sessions (all interacted with a confederate at session 2): physical (interacted with a confederate at both sessions), imagined (imagined interacting with an out-group member at session 1) and control (answered a questionnaire at session 1). Results showed there was no significant effect of contact and PVD on attitudes towards homosexual men. A pattern was shown in the descriptive statistics in the direction expected.

Hannah Martin
University of Bristol

Effects of Plain Cigarette Packaging on Tobacco-seeking Behaviour in Smokers

Research indicates that packaging cigarettes in plain packets, where promotional brand information is removed, could increase the effectiveness of on-packet health warnings. The present study used an outcome-devaluation protocol to investigate whether viewing plain or branded cigarette packs containing health warnings is more effective at reducing subsequent goal-directed tobacco-seeking. Thirty seven weekly and daily smokers were first trained to earn tobacco and chocolate reward points in a concurrent choice task, before tobacco was devalued by viewing images of branded or plain cigarette packs. Choice for the two rewards was then tested in extinction, that is without feedback of outcomes, to measure goal directed control of tobacco choice. Various self-report measures were also recorded. Analysis of variance indicated no significant change in tobacco choice or self-reported smoking urges after viewing either pack type, which suggests that the presence of branding information has no effect on the impact of on-pack health warnings on tobacco-seeking behaviour. Other possible explanations for the present findings are also discussed, together with limitations and suggestions for future research.

Alice Mills
University of Bristol

Schizotypy and Processing Styles: how do they correlate with apophenia?

Erroneous pattern perception is thought to be related to supernatural belief. This experiment closely replicated a previous final year project which found a positive correlation between the two. The only difference was the method for measuring the threshold of acceptance for ambiguous stimuli, which was created specifically for this experiment and used computer-generated images. The development was guided by psychophysical techniques, and the analysis was based on Signal Detection Theory. Two questionnaires were also used; the O-LIFE to measure schizotypy (related to superstitious belief) and the REI to measure processing styles. The hypothesis was that individuals with higher levels of erroneous pattern perception/lower thresholds of acceptance, would have higher levels of supernatural beliefs and be more prone to experiential processing. No such correlations were found, although this may be due to problems concerning the suitability of the questionnaires. The visual search task can be used in conjunction with other questionnaires and potentially inhibitory measures in an attempt to reveal the link between erroneous pattern perception and supernatural beliefs.

Katie Jackson
University of Bristol

Exploring the Effect of Glucose on Attention and Recognition Memory for Angry and Fearful Faces with different Gaze Directions

The effect of glucose administration and emotional expression of target faces, on visual attention and recognition memory were examined in a single blind, placebo-controlled, mixed design study. Reaction time and accuracy in two visual searches of angry and fearful faces, with different gaze directions, were tested in 60 young adults. Glucose had no effect upon visual attention performance. One week later, recognition memory for target and distracter faces was tested using the 'Remember-know' paradigm. Glucose effects on encoding, consolidation and retrieval were investigated. Target faces were recognized more often than distracter faces. Glucose administration at the encoding stage only, resulted in a reduced number of 'remember' responses for distracters. However, if glucose was additionally administered at retrieval, 'remember' responses for distracters were just as high as they were for targets. These results provide further evidence that at retrieval, glucose supports the recollective component of recognition memory, and that this effect generalizes to faces. No interaction between glucose administration and emotional expression was found for visual attention or recognition memory.

Heather Moult
University of Bristol

Are external letters 'special' in visual word recognition? An investigation using a phonologically controlled picture-word interference task

Visual word recognition models (VWR) tend to emphasise external letters for word recognition, but recent research has suggested that letter position coding mechanisms can be flexible. Transposed letter (TL) (e.g,. jugde- JUDGE) non-word experiments expose letter position encoding mechanisms. This experiment used TL non-words to investigate the importance of external letters in VWR in a picture-word interference task (PWI) when non-word phonology was controlled. 28 undergraduate students completed a DMDX PWI with 128 trials and four conditions; semantically and unsemantically related words, and external and internal TL non-words. The non-word conditions phonology was controlled by matching average bigram token frequencies. Response times (RT's) to name the picture out loud were recorded and analysed. Repeated measures t-tests found semantic interference effects and no significant difference in RT's between the two TL non-word conditions, contradicting previous findings. The implications of these findings on reading models are discussed.

Julie Jay Garry
University of Exeter

Using loss or gain framed text messages to improve help seeking intentions for depression.

Goal framing, emphasising either the gains or losses associated with a behaviour change have been identified as an effective method of persuading individuals to

engage in health behaviour change. Little is known however regarding the extent to which it may be effective in supporting help-seeking intentions for depression, a condition for which many people delay or do not seek help. This study seeks to examine the extent to which gain and loss framed messages delivered by SMS text messaging influence the intention to seek help in the future for depression in individuals without current depression. 82 undergraduate participants completed a battery of questionnaires related to help-seeking intentions (General Help Seeking Questionnaire) and behaviours (Actual Help Seeking Questionnaire) and to assess current level of depression (PHQ-9). They were then randomly allocated to receive one of three types of text message – loss-framed, gain-framed, information about depression (control group) – related to help-seeking over a 2-3 week period. Participants then completed the questionnaire battery again with ANOVA used to compare improvements in help-seeking intentions and behaviours across the three conditions. Results are discussed in terms of the effect that framing SMS text messages in terms of gain or loss have upon help seeking with considerations for implementing in health care settings considered.

Jennifer Wing, Amy Goodwin, Georgina Hobson, Emma Dunnett, Claire Hubbard and Daniel Orton
Exeter

A moment's madness- a lifetime of sadness: An evaluation of a road safety intervention programme using the Theory of Planned Behaviour

Past research has indicated passengers can have an important influence on a driver's safety-related behaviour, particularly for young drivers. However, little research has investigated the effect of road safety interventions on passengers' intentions and behaviour. We used the Theory of Planned Behaviour to assess the effect on young people aged 16-18 years of attending the Learn-2-Live intervention programme. An online questionnaire presented vignettes where the respondent could influence a driver's behaviour, and we assessed respondents' attitudes, perceived behavioural control, subjective norms, behavioural beliefs and behavioural intentions pre and post intervention. We predicted that attending Learn-2-Live would have a positive, road-safety appropriate effect on these variables. There was a significant increase in participants' behavioural intentions to act in a road safety appropriate manner. Path analysis using linear regression revealed that changes in attitude and subjective norms post-intervention had the biggest influence on changes in behavioural intentions. We propose that interventions directly challenging young peoples' attitudes to road safety and highlighting appropriate subjective norms will be most effective in changing their road safety appropriate intentions.

Isabel Parsons
Plymouth University

Getting a Grip on the Meaning of Nouns: An Electrophysiological Exploration of Embodied Cognition

Previous research suggests that reading the name of an object elicits neural activity associated with the actions used to manipulate that object. The present study used event-related potentials to investigate whether this motor activity plays an important role in noun comprehension. In a Go/No-go task, participants categorised object names by responding with a grip that was either compatible or incompatible with the action used to grasp the object. The results revealed a larger N400 for words when participants responded with an incompatible grip or when they had to inhibit a compatible one. These findings suggest that motor activity associated with the manipulation of an object is important for understanding the name of that object.

Kirsty Smith
Plymouth University

How fear and anger from 9/11 impacts attitudes towards the conflict in Libya

This study aimed to see if an emotional manipulation of fear and anger from 9/11 footage would impact participants' attitudes towards the conflict in Libya. Right wing authoritarianism (RWA) was tested to see if it was a moderator. The self-report study (N=104); in which experimental participants were exposed to 9/11 footage, indicated some support for attitudes differing between conditions. There was a difference between conditions and avoiding conflict, however this was not significant (p [.083). RWA had some interaction effects with trends for avoiding conflict and dictatorship attitudes. Supplementary correlations and significant z-scores were found for all sub-scales and RWA scores in the experimental condition. This indicates that although the emotional manipulation affected attitudes, RWA scores played a role.

Abigail Corcoran
Plymouth University

How to relieve the exam blues.

What do you do to relieve stress? Stress is an increasing problem in the UK, and in the current economic climate, low cost solutions to tackle the problem should be considered. An increasing body of research suggests natural or 'green environments' are beneficial to human psychological wellbeing, and recent studies have taken this idea further proposing water or 'blue environments' have an even greater effect. The current study suggests an accessible form of blue environment can be found in aquaria. A large amount of anecdotal support suggests aquaria have calming, relaxing influences, but as of yet, no systematic research has been completed. After exposure to a stress inducing task, participants heart rate decreased and mood elevated significantly more so when watching an aquarium tank for 10 minutes as opposed to a control condition.

James Nagata
University of Bristol

Strategies to overcome the neural and attentional demands of multiple object tracking

The dynamic environment humans are presented with poses the visual system various challenges, which can be computational and attentional in nature: aspects in both are explored in the present study. Firstly, how humans are able to use motion information to overcome the computational and neural demands in tracking objects. In particular, the focus is on the possible involvement of a motion extrapolation mechanism which has recently proved a divisive issue. The second concern addressed in this study is whether attention can be split when tracking multiple objects and, crucially, whether this attention can be strategically distributed in an unequal manner, as required in naturalistic scenarios. Both experiments utilised a multiple object tracking (MOT) paradigm, manipulating the predictability of object motion (Experiment 1) and the attentional competition between objects (Experiment 2). The results suggested that motion information is not used in an extrapolatory manner during multiple object tracking. In addition, participants were able to strategically allocate more attention to certain targets depending on their goals.

Sara Cariad Davies, Stevie Symes and Eleanor Pyke
University of Exeter

The role of stigma and personality in help-seeking behaviours in post natal depression

Postnatal depression affects approximately 13% of new mothers, and less than 25% of women will seek professional help for their symptoms. Due to the negative affects of this illness on mother and child, further research is needed to understand the factors that prevent women seeking help. This research examined the role of stigma (personal, perceived and motherhood), and personality traits (negative affect, inhibition and reward responsiveness) on recommendations for help seeking (medical, psychological, self-reliance and social support). Data was collected from 370 participants from the general population who completed an online study. It was hypothesised that stigma, personality and previous help-seeking behaviours would affect help seeking recommendations. It was also hypothesised that previous help-seeking or knowing someone else who had sought help would moderate help seeking recommendations. We hope the results of this study will provide healthcare providers with a better understanding of the factors influencing help-seeking behaviours in post natal depression.

Sapphire Mason-Brown and Lucie Burdett

University of Exeter

The Effect of group-directed criticism and praise on social perception of the feedback source

The present study aims to bridge the gap between research into the effect of threat on categorisation, criticism perception and responses to criticism. Undergraduate Exeter University psychology students read a fictional post from a forum in which a student with an ambiguous group identity (a fellow psychology student but from a different university) delivered feedback about Exeter Psychology students, the participants' in-group. This feedback was either positive or negative and made internal or external attributions. The participants then answered questions indicating their reception of the feedback and feedback source. We posit that criticism can be perceived as a form of threat, and as a result of this, the source of criticism is more likely to be categorised as an out-group member than someone offering praise. Both whether the feedback in negatively perceived and whether the feedback source is seen as a member of an out-group will be moderated by whether the feedback makes an internal or external attribution about the in-group. If the feedback is negative and the attribution internal, the source of feedback is more likely to be negatively perceived and the feedback source seen as an out-group member.

Tala Mattar
University of Bristol

The Effects of Constraints on Liberty on subjective health in Palestinian populations

A comparative insight into the differential health effects of constraints on liberty in Palestinians in three geographical locations; West Bank, Jordanian refugee camps, and Jordanian residential areas (N=516). Using Univariate Analysis the impact of constraints on movement, culture, justice, political expression and identity were associated with subjective health, and with depression and anxiety. A local pattern of subjective health was identified and was directly correlated with constraints on freedom; however this correlation did not occur with mental health scores. The Palestinian population of the West Bank –under occupation- scored highest on constraints on liberty measure, and had significantly poorer subjective health, followed by those in refugee camps, then those outside refugee camps; concluding that constraints on liberty are important indicators of subjective health. Depression and Anxiety for all three groups was equally elevated; inconsistent with the degree of constrains on liberty of each location. The indicators for mental health may be high poverty, negative regional political change, and/or social conditions rather than constraints on liberty.

Katie Joyce
Plymouth University

Embodiment of other agents' preferences: Do we automatically attend to objects that we think another person will find relevant?

If a person looks at an object then we are quicker to respond to a cue appearing on it as opposed to on another object. We test whether these gaze cuing effects only reflect the other person's overt gaze or whether they can be driven by what we expect them to look at. Participants were presented one of two faces with an object on either side, one food and one drink item. In half of the trials, the face looked at one of the objects and the participants had to pick up on a cue which could then appear on either of them, but in the other half the agent looked straight ahead. Unbeknownst to the participants, we manipulated which object each face looked at. One might only look at drink items while the other only looked at food items. As predicted, even when the faces were looking straight ahead, observers were faster in making judgements on objects this person typically looked at, even though participants were not consciously aware of these relationships. This can be understood as an embodiment of other agents' preferences, causing us to attend to objects that we think others find relevant.

Sarah Shenton
University of Bristol

Effects of the 7.5% CO_2 challenge on a face matching task

Anxiety has been shown to have a negative effect on cognition, but it has never been studied in relation to face matching. Therefore the aim of the study was to investigate what effect anxiety has on face matching ability. Thirty participants were recruited using a strict screening procedure. Participants were given medical air and 7.5% CO_2 and completed a face matching task during each 20 minute inhalation. Physiological and subjective measures of anxiety were taken before and after inhalations and at regular intervals. Results showed that participants made more errors whilst inhaling 7.5% CO_2. Trait anxiety was not a significant predictor of performance but did correlate with performance in the air condition. There was higher accuracy in response to mismatched faces, showing a response bias to 'different'. This research validates the CO_2 challenge as a method of inducing anxiety, and lends support to Eysenck's attentional control theory. It has implications in criminal proceedings and the selling of age-restricted products and paves the way for much future research.

Helen Sharps
Plymouth University

Win or lose? Simon didn't say, until now.

The Simon effect reflects that responses on the same relative location as an eliciting stimulus are faster and more accurate. This paper investigates the manipulation of the Simon effect using desirable/undesirable stimulus outcome. The participants

observed a game of Rock Paper Scissors in which they were entrained to an egocentric perspective and asked to identify if their player won (desirable) or lost (undesirable) with spatially located responses. Pilot data (n=13) reveals that the Simon effect was only observed for desirable outcomes. For undesirable outcomes, the speed advantage for spatially congruent responses was eliminated. This experiment highlights that it is not only goal location that determines the speed at which one can respond but it is also affected by the potential outcome of the response. The more desirable the intended action outcome the greater advantage when responding.

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Sarah Cartwright, Danielle Palmer, Rebecca Hopkins, & Tamsin Parker
University of Plymouth

A performance comparison between typically developing children and children with ASD with regard to rule violation detection involving a perspective shift

This research investigates the differences between typically developing (TD) children and children with ASD when they are reasoning about rule violations, within either a social or abstract context. The children completed two tasks: a violation detection task and a reduced array selection task (RAST), both of which are child friendly versions of the Wason Selection Task. Both tasks required the participants to identify the possibilities of rule violation and identify when a rule had been broken. Perspective was also manipulated in the violation task. Initial analyses show that TD children perform better with social rules, while the children with ASD performed equally on the social rules as they did on the abstract rules. Interestingly, no effect of perspective was found, suggesting that the ability of children with ASD to take the point of view of another person has been underestimated in some previous research.

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Amy Goodwin
University of Plymouth

The Redundant Target Effect in Autism Spectrum Conditions

The Redundant Target effect (RTE) is a phenomenon where responses are made faster to bilaterally presented visual stimuli than unilateral stimuli. Paradoxically, individuals with damage to the corpus callosum (CC), i.e. split-brains, have been found to show larger RTEs than neurotypicals (NT) due to fewer hemispheric connections. This may also be true of those with fewer/disrupted hemispheric connections through the CC because of conditions such as Autism Spectrum Conditions (ASC) but is, as yet, untested. The aim of this study was to ascertain whether there is a RTE in ASC when compared to NT due to disrupted hemispheric connectivity. DTI data obtained in a previous MRI study with the same participants has been utilised to demonstrate differences in inter-hemispheric connectivity between individuals with ASC and NT. Participants were tested behaviourally with a task in which both unilateral and bilateral visual stimuli were displayed in order to test RTE in ASC.