Simona Kariciute, University of Leeds Business School
The Impact of Different Sponsorship Disclosures on Advertising Recognition and Author’s Credibility on Instagram

Instagram is a worldwide-popular social media site based on photo sharing. Social media influencers are independent endorsers who influence audiences through their social media activity. Instagram influencer endorsements are becoming increasingly popular amongst brands to reach their customers. This study investigates and builds on the existing marketing literature by examining the effects different disclosure types have on advertising recognition and endorser’s credibility on Instagram. Four disclosure types were examined in this paper: #ad, #sponsored, #collaboration and “Paid partnership with” badge. Research participants (N = 103, 73% female, aged 18-24) were conveniently sampled self-reported regular Instagram users. The participants were shown seven Instagram posts and asked questions regarding advertising recognition, author’s credibility, ability to recall the disclosure and disclosure clarity.

This study found that disclosures that had clear wording, were positioned in the post caption where users’ attention is often focused, and visually stood out from the background generated more advertising recognition, but resulted in lower source credibility. This could be because this kind of disclosures were not as explicit as the ones in comparable studies where more words-friendly channels were tested, hence participants might have perceived them as suspicious. Advertising recognition is important to generate persuasion knowledge used to make informed decisions in the marketplace. The present study shows that advertising recognition can be manipulated through advertising disclosure position, saliency, and language clarity. The findings suggest that consumer advocates should impose rules regarding these specific disclosure attributes to ensure the endorsement transparency and consumer rights protection.

Xu Liangxin, Biological Sciences
Loss of Water Phase from Casein Gels Under Gravity is not Correlated to Gel Firmness

The main requirement for milk processed in most cheese products is its rennet coagulation ability. Resulting in the formation of a gel, which is the main structural element of many products. Characterising the properties of the gel is important to understand the product quality. Currently, the formation of these products from skimmed milk powders is of interest due to the convenience of storing and transporting milk powder and their extended shelf life. Often in products where a soft solid is formed, the process of syneresis is observed, that is, the expulsion of a liquid from a gel. Under constant external conditions this may be driven by gravitational forces or be due to intermolecular forces such as those during protein denaturation e.g. whey expelled during cheese making. Using a previously developed technique for monitoring the degree of syneresis in milk gels subjected to the gravity we evaluate fresh skimmed milk under low temperature short time, high temperature long time, and re-constituted skimmed milk powder. Syneresis is termed as the mechanism of whey segregation that is triggered by the means of contraction, which results into the rearrangement or restructure of casein matrix developed all through the enzymatic coagulation. There are numbers of elements that are capable of impacting the syneresis mechanism. This research paper aims at reporting levels of observed syneresis over time from the various processing conditions of milk to assess the effect of milk gels made from fresh skimmed milk and skimmed milk powder. Rennet were used as gelling agents.
Emily Dingley, Biological Sciences

Dance Activator Programme - The benefits of a community dance programme to the physical and psychological well-being of socio-economically disadvantaged older adults.

Physical inactivity and sedentary behaviour are a common problem in community dwelling older adults (aged 55+ and living independently) and subsequently impact physical and psychological health and well-being. The Dance On Programme is a multidisciplinary team project (One Dance UK, Yorkshire Dance and University of Leeds) that seeks to engage inactive socio-economically disadvantaged older adults in weekly dance sessions (2 sessions per week for 90mins) across 3 different areas of Yorkshire (Leeds, Bradford and Doncaster). The research will involve collecting and analysing data at the start of the dance intervention and then follow ups at 3 months, 6 months and 12 months to track the physical and psychological benefits of dance participation. We would expect to see benefits in physical well-being by improvements in physical activity levels (measured using accelerometers and short active lives questionnaire), balance and mobility (measured by timed up and go and falls efficacy scale). We would also expect to see improvements in psychological well-being by seeing improvements in cognitive function (measured by trial making task), social isolation/loneliness (measured by Duke social support index), and quality of life (measured by EQ-5D-3L). The Dance On Programme also aims to be rolled out nationally and potentially internationally by providing training and evidence of how to implement a dance programme in the community and how to track the benefits.

Shimal Nemat, Katie France and Ella Carter, Medicine and Health

Knowledge of Periodontal (Gum) Disease amongst the general public of Leeds

Periodontitis, an inflammatory condition affecting the periodontal tissues (gums) is a common dental disease that can result in premature tooth loss. As periodontal disease can, in most cases, be regarded as a preventable disease, strategies are paramount to reduce the global prevalence. International literature has investigated their public knowledge of periodontitis, however, there is limited research conducted in England. Establishing any common disparities of knowledge will ensure future health education campaigns can target this. Therefore, our aim is to investigate the current periodontal knowledge in Leeds.

There were 103 participants in total, aged 16+ from different locations in Leeds. Multiple-choice questionnaires were distributed, targeting different aspects of periodontal knowledge. Average scores were calculated and compared between demographics.

Participants received an average score of 62%, performing best at questions concerning Prevention, Signs and Symptoms, and Treatment. The largest disparity was in knowledge of systemic conditions and their relationship with periodontal disease. There was a statistically significant difference in knowledge between all age categories \[F (2,100) = 6.20, p=0.03\]. Participants 61 years and above achieved 46% compared to the 16-35yrs category (65%). 'Dental Professional' or 'Media' (TV and Online), was the preferred method for receiving information in the future.

We acknowledge smaller than expected sample size as a limitation. The significant differences in age category is consistent with previous literature. Findings in regards to common misconceptions and ‘preference of future information’ are innovative to the research base.

Our study has illustrated significant differences between ages, common misconceptions and preference of future information. These findings will help public health education to address common misunderstandings and disparities of knowledge.
Laura Lagares Ballantine, Biological Sciences  
A Literature Review of Paediatric Supratentorial Ependymomas and Addressing the Gap in Genetic Diagnostic Testing

Ependymoma tumours (EPNs) arise from glial cells of the central nervous system and are the third most common paediatric brain tumour. Diagnosis usually comes from observing the tumour’s cell structure; however there is difficulty distinguishing between grade II and III EPNs due to their similar morphology. Identifying a genetic basis would eliminate this difficulty and can inform clinicians to avoid aggressive treatment such as chemotherapy. In EPNs, tumours located above the tentorium cerebelli (supratentorial) often present significantly more genetic mutations than those found below the tentorium (posterior fossa) making these a target for genetic testing.

Of supratentorial paediatric EPNs, 70% harbour a gene fusion between the V-Rel Avian Reticuloendotheliosis Viral Oncogene Homolog A (RELA) and the uncharacterised gene c11orf95. There are 7 different ways for these to fuse, however the most common is between exon 2 of c11orf95 and exon 2 of RELA (Type 1) or exon 2 of c11orf95 with exon 3 of RELA (Type 2). Both fusions lead to continuous activation of NF-kB transcription regulators, leading to uncontrollable cell proliferation, causing tumours.

Another possible target for EPNs is a fusion between Yes-Associated Protein 1 (YAP1) and Mastermind-like domain containing 1 (MAMLD1). This fusion has been found in the majority of supratentorial EPNs without a RELA fusion.

This review introduced a diagnostic test to the Leeds Genetics Laboratory. This leads to categorical diagnosis of EPN tumours, indicating a promising prognosis and faster treatment. Originally a reverse-transcriptase PCR test seemed most likely, although Fluorescent In-Situ Hybridisation is now more appropriate.

Holly Clayphan-Taylor, Biological Sciences
The Interaction Between Ecological Variation and Social Learning on the Occurrence of Culture

The existence of culture in nonhuman animals is still being debated amongst zoologists and psychologists. It is accepted that social transmission, ecology and genetics can all lead to the same pattern of group specific-behaviours that appear to be culture, making it difficult to determine which is responsible in any given case. One approach in identifying culture is the method of exclusion, which attempts to remove ecology and genetics as factors to identify culture within a population. An alternative perspective on this is that these factors, or more, could be interacting with each other resulting in stronger cultural effects than each in isolation, i.e., the sum is greater than the individual parts. In this paper, culture was tested for by measuring the within-group homogeneity and among-group variation. Using an agent-based model, this study demonstrated that high levels of social learning and the presence of ecological variation resulted in higher within-group homogeneity and higher among-group variation and that these two factors had non-additive (interactive) effects on the observed level of culture. This reveals that social learning and ecology need not, and should not, be competing hypotheses but as interacting variables that contribute to culture. Here, several candidate cases of nonhuman culture are re-examined with this new perception. The implications of this non-additive effect from an evolutionary and ecological perspective are also discussed, particularly the use of prediction models to determine how species will react to environmental changes.
Noor Rashdan, Education, Social Sciences and Law
The Kingdom of Bahrain: Perspectives, Challenges and Future Possibilities of Inclusive Education

Currently, Inclusive Education (IE) is an under-researched area in the Kingdom of Bahrain, thus regardless of the inclusive policies and legislations Bahrain established and took part in, there is a lack of validation over whether it is being successfully implemented or not. This study aims to explore IE through examining the different perspectives, challenges and future possibilities of this phenomena in my home country, Bahrain. 96 Participants include a policymaker, as well as parents and teachers of two mainstream schools, one special school and two special institutes. The research procedures included observations of the schools’ physical environment, as well as conducting questionnaires and interviews which sought participants’ attitudes and knowledge towards IE through the use of the Attitudes Towards Inclusive Education Scale (ATIES) and the Concerns about Integrated Education (CIE) scales. The findings of the study were analysed through the use of thematic analysis. The main findings show that the perspectives of the participants were a combination of the medical and social model of disability. Whilst many encourage the inclusion of children with special educational needs (SEN) into mainstream education, others still demanded an increase in schools for children with SEN. The findings also established six main themes acting as barriers to IE; communication and collaboration between different bodies, physical impediment, support of higher authorities, weak model of assessment and education for children with SEN, professional development and mostly lack of awareness and negative attitudes. Results revealed the importance of removing the societal barriers through increasing awareness amongst individuals in the Bahraini society regarding inclusion and children with SEN.

Lisa Fielding, Education, Social Sciences and Law
Examining the aspirations and motivations of Key Stage 1 and Key Stage 2 pupils for future life paths and the potential factors which influence these.

This study sought to examine the aspirations and motivations of children in Key Stage 2. A creative methodology was employed, the chosen method engaged children with drawing their aspirations, followed by drawing their interpretation of a ‘life path’. This was modelled with a simple ‘life path’ drawing. The focus of this project was to research with children, allowing for ownership and an opportunity to express thoughts through drawing. Stage one involved researching with the children and encouraging them to draw their thoughts. Stage two focussed on analysis. The children produced two drawings which were carefully analysed, looking for trends across their work and identifying any significance in their use of images.

Data collected highlights that children have clear ideas about aspiration. They largely discussed realistic, as opposed to fantasy, occupational aspirations; thought to be uncommon for this age group. As well as this, each child aspired to be happy.

The immediate impacts of this study, for the participants, include having an opportunity to think about their aspirations and what motivates them, also their ‘life path’. It has also clearly highlighted the necessity of allowing children ownership of research carried out with them. The results clearly demonstrate the need for further study in this age group, examining these thoughts on a larger scale, whilst also including a richness of data that cannot be achieved from more traditional methodologies. By continuing further research in this area, we could gain a rich insight into the way children perceive their place in society.
Thomas Raistrick, Maths and Physical Sciences  
**Understanding liquid crystals that stretch**

Liquid crystal elastomers (LCEs) combine the anisotropy and orientational order of liquid crystals with the entropic elasticity and mechanical properties of polymer systems. LCEs display some unique phenomena including the formation of stripe domains [1], mechanical-Fredericksz transitions (MFTs) [2], semi-soft elasticity (SSE) [1] and shape responsiveness to external stimuli. [3] Because of their unique properties, LCEs have far reaching applications such as artificial muscles, soft actuators and rubber lasers. Theoretically, many of these properties have been described by Warner and Terentjev (W&T). In these models, it is assumed that the order of the LCE is constant during a mechanical deformation. Whilst some experimental findings agree with this assumption, there have been findings that show the order changes significantly during a mechanical deformation. [4] In our material we inferred, the polymeric backbone order parameter can change from +0.74Å±0.03 to -0.41Å±0.01 i.e. it became negative, a counter-intuitive phenomenon that we have proposed to be the cause of the negative Poisson ratio found in our LCE system.[4]

In previous works, the order parameter of LCEs has been inferred using polarised microscopy, X-ray diffraction and FTIR. Herein, Raman spectroscopy was used to determine the order parameters of an LCE undergoing a mechanical deformation. The value of and in the unstrained state was found to be +0.67 Å± 0.05 and +0.28 Å± 0.05 respectively. In the unstrained state, the values agree with those found using polarised microscopy. However, the strained values differ. We discuss this apparent disagreement and its consequences.

Anna Garms, Medicine and Health  
**The use of Sildenafil (Viagra) as a potential treatment for Nephrogenic Diabetes Insipidus**

Nephrogenic diabetes insipidus (NDI), a debilitating condition with patients producing up to 20 litres of urine/day, occurs due to failure of the kidneys to respond to vasopressin causing an inability to concentrate urine.

Vasopressin (anti-diuretic hormone) stimulates intracellular events, leading to translocation of the aquaporin channel AQP2 to the apical membrane of the collecting duct principal cells, enabling water reabsorption. Additionally, binding of vasopressin increases transcription of AQP2, promoting long-term expression of the protein. In NDI the kidney cannot respond to vasopressin, however an alternative pathway dependent on the signalling molecule cGMP can induceAQP2 translocation. Therefore drugs acting on this pathway, such as Sildenafil could also induce AQP2 translocation.

To test this hypothesis, mice collecting duct cells were treated with sildenafil, vasopressin or a control medium. After incubation, immunocytochemistry was performed to establish the location of the AQP2 in the cell. Cells were studied using fluorescence and confocal microscopy.

Control cells had 53.5% (Å±3.5) AQP2 labelling in the top section; whereas vasopressin and sildenafil treated cells had significantly more, 86.2% (Å±3.6) and 86.9% (Å±2.4) respectively (n=9). This shows that sildenafil mimics vasopressin in the shuttling AQP2 to the apical membrane, enabling water reabsorption. However, unlike vasopressin, sildenafil did not increase AQP2 expression. Sildenafil is likely to be beneficial to patients with NDI, the effect of which may be enhanced if combined with an agent that increases AQP2 expression. An effective treatment could have implications for patients with NDI, significantly reducing urine output and increasing the quality of their lives.
Clare Burgess, University of York
On the Barricades: the hidden history of women in the French Revolution

Could the French Revolution have succeeded without women? Why are the stories of the women of the French Revolution so often forgotten? These are the questions that this research aims to answer, combatting the incredibly male-centric narrative which is so persistent when recounting the French Revolution. To do so, it will use the lives of six extraordinary women as a window into female participation in the Revolution. In theory, these six women will represent a broad cross-section of French society, and thus will not all come from one social class or political group. Most of the existing work on this subject focuses on the futility of these women’s struggle for rights, and their limited contribution to the Revolution, whereas this project intends to focus on the women themselves: their opinions, their impacts, their lives.

Starting with the most basic of sources – the travel writings of English women in France at the time, the works of Olympe de Gouges and Mary Wollstonecraft, for example – the research will eventually entail detailed study of archival material in both French and English, in Paris and in London and York. It is likely that the collections at the Bibliotheque de Marguerite Durand and the wider French National Archives, as well as the British Library’s collection of French Revolutionary Tracts, will constitute a large part of the source material. The intellectual writings of women such as Olympe de Gouges, along with the physical actions of other women, and the participation of women of the third estate are expected to prove essential to the course of the French Revolution. It is my intent to show just how essential women were to the French Revolution, and by extension, how essential they are to any revolution.