

Schools of Health & Education, Science & Technology and Institute for Work Based Learning



Annual Research Conference 2013

Welcome to the 2013 Summer Research Conference



I am pleased to be able to welcome you to this year's Research Students Summer Conference. This year we have expanded to include three schools, the Schools of Science and Technology, Health and Education and the Institute of Work Based Learning.

The conference provides an exciting opportunity for cross school interaction of researchers and for the exploration of common grounds and interests. It is a forum for researchers to present their work, either as oral or as poster presentations, receive feedback and stimulate discussions.

The conference also offers an excellent opportunity for all members of the Schools to explore the wealth and breadth of the research in our University and to discuss and contribute to further development of ideas and critical thinking.

I would like to encourage you, even if not directly involved in the presentations, to participate fully in the discussion sessions at the end of each oral presentation and engage with the poster presenters during the lunch break.

I hope that you will find the day stimulating and constructive.

Hemda Garelick

Professor Hemda Garelick

PROGRAMME

College Building
Hendon Campus

- 9.00-9.30 Registration and coffee
Mezzanine 1 - Quad
- 9.30-9.45 Welcome and introduction to the conference –
Venue C115
- 9.50 – 11.30 Parallel Sessions ‘A’ ‘B’ & ‘C’
Parallel Session ‘A’ Venue – C207
Parallel Session ‘B’ Venue – C209
Parallel Session ‘C’ Venue – C109
- 11.30 Break
- 11.45-13.00 Poster Presentations (25 x 3 minutes)
Venue- C115
- 13.00 – 14.00 Lunch and poster viewing
Mezzanine 1 & 2 - Quad
- 14.00 – 15.20 Parallel Sessions D&E
Parallel Session ‘D’ Venue – C207
Parallel Session ‘E’ Venue – C109
Parallel Session ‘F’ Venue – C209
- 15.20– 15.45 Break
- 15.45 – 16.00 Prize Presentations and closing remarks – C115

Oral Presentations

Morning Sessions

Session A	
9.50am – 11.30am	
Psychology/ Psychotherapy	
	Chair: Dr Paul De Mornay Davies
09.50 – 10.10	Paper A1 <i>Anthony Murphy</i> Experiencing diagnosis and care as a parent with Borderline Personality Disorder
10.10 – 10.30	Paper A2 Charlotte Macgregor An Existential Formulation of Transformative Experiences in Nature
10.30 – 10.50	Paper A3 <i>Anders Drabey Sorensen</i> A comparison of learning processes in CBT and Existential therapy
10.50 – 11.10	Paper A4 <i>Stella Gould</i> A phenomenological exploration of psychotherapy experienced by prisoners serving an indeterminate sentence for public protection
11.10 – 11.30	Paper A5 <i>Sheila Peelo</i> On being held captive by the unwelcome guest'. Trauma practitioners experiences of working with the victim-self

Session B

9.50am – 11.30am

Computer Science

	Chair: Prof Richard Comley
09.50 – 10.10	Paper B1 <i>Esmat Mirzamany</i> Efficient NSIS Mobility Support for Mobile Networks
10.10 – 10.30	Paper B2 <i>Joshua Nwokeji</i> CiML: A Consolidated Intentional Modeling Language
10.30 – 10.50	Paper B3 <i>Anhtuan Le</i> Intrusion detection system for detecting the internal threats in 6LoWPAN
10.50 – 11.10	Paper B4 <i>Payam S. Rahmdel</i> Fourier-based line segment detection and its application to lane marker detection
11.10 – 11.30	Paper B5 <i>Shahadate Ahmed Rezvy</i> A Resource Block Allocation Technique to Mitigate Interference between Femtocell and Macrocell

Session C

9.50am – 11.30am

Biological and Environmental Science

	Chair: Dr Diane Purchase
09.50 – 10.10	Paper C1 <i>Anna Sniecinska</i> Endocrine and neurophysiological examination of sleep disorders in Williams syndrome
10.10 – 10.30	Paper C2 <i>Anna Zuk</i> The Therapeutic Potential of Arsenic Trioxide in the Treatment of Epithelial Origin Cancers
10.30 – 10.50	Paper C3 <i>Leaonrdo Pantoja Munoz</i> Challenges of Arsenic Speciation in Environmental Chemistry
10.50 – 11.10	Paper C4 <i>Meghan Alexander</i> Constructions of flood vulnerability across an etic-emic spectrum
11.10 – 11.30	Paper C5 <i>Russel Kabir</i> Characteristics of Respondents in Climate Change affected Coastal area in Bangladesh

Oral Presentations

Afternoon Sessions

Session D	
2pm – 3.20pm	
Practice based research	
	Chair: Dr Kate Maguire
14.00 – 14.20	Paper D1 <i>Christopher John Goscomb</i> Bridging, Making and Curating Building sustainable interventions
14.20 – 14.40	Paper D2 <i>Chris Erskine</i> Exploring The Lifeworlds Of Community Activists
14.40 – 14.50	Paper D3 <i>Angela Christopher MBE</i> Impact of Offender Employment Learning & Skills on re-offending
14.50 – 15.20	Paper D4 <i>Agatha Benyera-Mararike</i> Paradoxes in practice: - Meaning and experience of receiving traditional western counselling (CWC) compared to culturally sensitive approach (AES) as experienced by HIV sero-positive African migrant women - An Interpretive Phenomenological Analysis (IPA).

Session E

2pm – 3.20pm

Cognition and Communication

	Chair: Prof Chris Huyck
14.00 – 14.20	Paper E1 <i>Nimai Parmar</i> Does scoring first and match venue have an effect on selected action variables and match outcome in professional rugby league
14.20 – 14.40	Paper E2 <i>Yetish Joshi</i> Local Perceptual Rate Control in Video Encoding
14.40 – 14.50	Paper E3 <i>Ryan Zammit</i> Social Networking for Knowledge Management
14.50 – 15.20	Paper E4 <i>Nazeida Jhingoor</i> Learning styles and learning approaches in dyslexia: implications for learning support in higher education

Session F

2pm – 3.20pm

Safety and Health

	Chair: Dr Lian Lundy
14.00 – 14.20	Paper F1 <i>Astra Kassiram</i> Indo and Afro – Trinidadian women’s experiences of help-seeking for domestic violence and somatization disorder
14.20 – 14.40	Paper F2 <i>Natasha Oyibo</i> Risk Communication as a Strategy to Combat Maternal Mortality in Nigeria: A Case Study in Rivers State.
14.40 – 14.50	Paper F3 <i>Justin Okoli</i> Decision making strategies used by experts and the potential for training intuitive skills: A preliminary study
14.50 – 15.20	Paper F4 <i>Simone Rozzi</i> Safety Critical Automation and its Organizational Precursors

Poster Presentations 11.45am to 1pm

Poster Number	Presenter	Title
Poster 1	Leonard Pantoja Munoz	Arsenic Chelation, The Meeting of Two Kingdoms
Poster 2	Shahadate Ahmed Rezvy	A Resource Block Allocation Technique to Mitigate Interference between Femtocell and Macrocell
Poster 3	Akile Berfu Zorba	Exploration of Stigma towards Mental Illness in Turkish and Greek Cypriot Communities
Poster 4	Ali Alhamari	Sustainable Stormwater Management for Urban Areas in Saudi Arabia
Poster 5	Ali Ross	A Phenomenological Exploration of the Transition by Ex-Army Servicemen Between 20-40 Years Old Returning to Civilian Life
Poster 6	Anne Elliott	'Corporeal dissociation': An investigation into experience of youth and adolescence and exercise uptake in middle age through a life course perspective
Poster 7	Ashley J. Wheat	Creating an enhanced and more engaging visitor experience in the museum using novel technologies
Poster 8	Bene Afolabi	Impact of prebiotics on bile acid induced colon cancer
Poster 9	Emma Kell	Shifting identities: A mixed-methods study of the experiences of teachers who are also parents
Poster 10	Frauke Elichaoff	The subjective experience of quality of life in older adults with ASD (autism spectrum disorders) in the UK
Poster 11	Hevlyen Seenan	A Risk Approach to Violence and aggression in Mental Health Institutions: The Impact of stress on Nursing Staff
Poster 12	Elizabeth Adegoke	Identifying the best strategies in raising awareness of Domestic Violence against Women in the BME Pentecostal Communities in the South of England
Poster 13	Paul Dickinson	Inquiry ADOC 2011-2014 Citizen empowerment through global business system
Poster 14	Rui Hui	A retrospective study of path planning for frameless stereotactic neurosurgical operation
Poster 15	Wai Kit Chan	Arsenic resistance in fungi and the possible interactions between arsenic resistance and tin/antimony
Poster 16	Stephen Posnett	Construction of a Composite Indicator (CI) to measure clients' perspective of quality of care of private veterinary practice in the UK
Poster 17	Yordan Zhekov	Conscience in recovery from alcohol addiction: Exploring the role of spirituality in conscientious

		transformation
Poster 18	Abdelrouf Ali	Hyperhomocysteinemia: implication in insulin resistance in patients with type 2 diabetes mellitus
Poster 19	Clement Ogeleyinbo	Drink Driving in Lagos
Poster 20	Jilly Pride	What are the cause of unsafe practice
Poster 21	Chineme Onyison	Exploring health-seeking behaviour among Nigerian migrants in the UK
Poster 22	Phong Nguyen	StoryLine: A Visual Analytics Environment for NarrativeConstruction through Timeline Visualization
Poster 23	Jackie Richards	When I'm 64 I want to dance! Examples of diagrams and grids assisting thinking processes to create a DProf involving emerging work
Poster 24	Jane Obi-Udeaja	An exploration of patient centred manual restraint: a phenomenological case study of two NHS mental health inpatient wards

ORAL PRESENTATIONS

SESSION A

**9.50am – 11.30am
C207 (College Building)**

PSYCHOLOGY/PSYCHOTHERAPY

Paper A1

Experiencing diagnosis and care as a parent with Borderline Personality Disorder

Presenter - Anthony Murphey

Abstract

This research aims to explore accounts of individuals diagnosed with Borderline Personality Disorder (BPD) who are also parents. Literature highlights negative attitudes amongst different health and social care professionals towards individuals with this diagnosis. These attitudes relate to overall prognosis, self-rated levels of empathy, comfort, and treatment. Negative attitudes can be demonstrated through inconsistent interactions resulting in poor outcomes, including: increased stigma, self-stigmatisation disengagement and malignant alienation, often contributing to increased incidence of para-suicidal and suicidal behaviours. To date efforts to understand the extent to which these attitudes are internalised by service users, from the perspective of service users are marked by their paucity. Coupling this with research findings highlighting poor outcomes among the children of individuals diagnosed with personality disorder, along with the marked child protection risk among this group, the present research aims to increase understanding from the perspective of BPD parents themselves. 12 parents diagnosed with BPD took part in semi-structured interviews, followed by an Interpretative Phenomenological Analysis. The findings are discussed in relation to previous research demonstrating inconsistency and iatrogenic interactions during the period of diagnosis. This is examined in the context of engagement, stigma and self-stigma with the proposal of a diagnostic trajectory model.

Paper A2

An Existential Formulation of Transformative Experiences in Nature

Presenter – Charlotte Macgregor

Abstract

Looking to the natural world for healing and sustenance is deeply rooted in ancient and modern indigenous and tribal cultures and rituals (Roszak, 1995, Milton and Higley, 2008). Research suggests that being outside has a beneficial impact on our mental-health (Mind, 2007). Many of us know this experientially, yet it is an aspect of well-being often taken for granted and side-stepped by the ethos of psychiatric systems that isolate the individual as the locus of distress and healing.

Some 2,500 years ago Hippocrates (1849) proposed that to consider the health of any person we must examine carefully the environment and seasons. Yet in present-day mainstream conceptualizations of health and well-being, exploration of the meaning of human embodiment in the natural world remains dormant. My research focused on detailed exploration of transformative experiences in nature and this paper offers an insight into the meaning of such experiences in the lives of the research participants that I interviewed. It also explores a broader consideration of the human-nature relationship, how we make sense of it and its relevance to well-being.

Using Deurzen's (2012) existential four-dimensional framework, I will provide examples from my research and from my own experience in the therapy room, alongside written accounts, to shine a light on this relationship and what *being-in-place* means to therapeutic practice.

Paper A3

A comparison of learning processes in CBT and Existential therapy

Presenter – Anders Drabey Sorensen

Abstract

The oral presentation highlights the idea and initial results of a doctorate project in psychotherapy and counselling. The project is based on the current need for a nuanced and comprehensive understanding of the outcome of psychotherapy, as part of the evaluation of the conceptual and empirical foundations of different therapeutic approaches.

The purpose of the study is to explore the lived experience of the outcome of psychotherapy through qualitative research. The precise aim is to draw attention to the special characteristics of this outcome in terms of learning outcome. This will regard both existential therapy and cognitive behavioural therapy and clarify the possible differences and similarities between the lived experience of the learning outcomes of these approaches. The study will also clarify the differences between existential psychotherapy as an art of learning directed at existential learning of authenticity and cognitive-behavioural therapy as a learning-based medical treatment technology directed at behavioural and cognitive learning of adaptive and functional responses that alleviates pathological symptoms.

Paper A4

A phenomenological exploration of psychotherapy experienced by prisoners serving an indeterminate sentence for public protection

Presenter: Stella Gould

Abstract

My research has been a qualitative inquiry using interpretative phenomenological analysis (IPA), founded on an interactive, inductive and deductive cycle: “engaged with exploring, describing and interpreting the personal and social experiences of participants” Smith (2008). This allows the participant to be the main focus of the analysis as the process enters the participant’s world and their life stories, thoughts and feelings concerned with the research topic.

I have applied IPA to prisoners in UK prisons who have indeterminate sentences for public protection (IPP), this form of sentencing was abolished in 2012 but has left some 6000 prisoners trapped in a form of limbo as they cannot be released until a Parole Board decides they have dealt with issues related to violence, yet they struggle to find places on suitable programmes. Attendance at group courses is inconducive to the level of self-revelation needed, whilst lack of familiarity, and mythical information, generates a fear of psychotherapy.

This study explores: A phenomenological exploration of psychotherapy experienced by prisoners serving an indeterminate sentence for public protection

During the presentation, I will describe the stages of the project, including such factors as ethical approval to work with a non-voluntary group of violent, disturbed and distressed individuals, how the research study was presented to them, the structure of the interviews and the methodology for subsequent analysis of findings. By the time of the session, I expect to be in a position to report also on some practical actions that have been stimulated by the research.

Paper A5

On being held captive by the unwelcome guest'. Trauma practitioners experiences of working with the victim-self

Presenter – Sheila Peelo

Abstract

Research/Work in progress

The presentation is based on my Doctoral Thesis which is now at submission stage.

It is more than 20 months in process.

Background

This paper investigates psychotherapeutic practice with victimization or victim-self. It developed from my own clinical work with survivors of childhood abuse with the Irish Health Service. Working with the victim presentation centres on the challenging transitional space between acknowledging victimization and encouraging greater agency.

Currently, victimization is so often constructed in terms of 'affects on identity' and the aim of therapy being to help the client overcome these 'affects'. This project however challenges such a formulation of victimization which can further objectify the client. The investigation group sought greater understanding of the reciprocal relationship between the victim-self and the therapist's response and thereby develop practice.

Aim

This presentation outlines therapists' constructions of the victim-self, how these impacted clinical practice and the alterations which came about a result of the investigation.

Design

A qualitative methodology was used which was based on Action Research Methodology specifically, specifically participative inquiry.

Outcome

The victim-self is a complex phenomenon which is negatively affected by constrained agency within practice, structures and the person of the therapist.

SESSION B

**9.50am – 11.30am
C209 (College Building)**

COMPUTER SCIENCE

Paper B1

Efficient NSIS Mobility Support for Mobile Networks

Presenter – Esmat Mirzamany

Abstract

In an effort to support resource reservation signalling IETF introduced the Next Step In Signalling (NSIS) suite as a generic framework. However, it causes significant overhead on the network and is not well-suited for mobile users. This paper presents a new mechanism to reduce the NSIS signalling overhead and resource reservation latency imposed by the node's mobility in mobile networks. The proposed architecture comprises of two parts: the mobility management mechanism and resource reservation mechanism. The former contains the multi-layer local

mobility anchor (LMA) in the domain and the latter comprises the pre-configured NSIS sessions between the upper layer LMA and the Lower layer intending to map all individual NSIS sessions belonging to the lower layer LMA in one NSIS session. The analytical framework is developed to evaluate the performance of the proposed architecture as compared to the basic operation of NSIS in the Proxy MIPv6 domain. Results obtained of the proposed scheme showed a significant reduction in the signalling overhead and resource reservation latency.

Paper B2

CiML: A Consolidated Intentional Modeling Language

Presenter – Joshua Nwokeji

Abstract

Intentional modeling (IM) focuses on intentions and motivations of software systems rather than behaviours. KOAS ("Knowledge Acquisition in autOated Systems"), and i* ("Distributed Intentionality") are the two popular IM languages used in requirement engineering. Each of these languages are defined as a collection of intentional elements, and intentional properties. However, these intentional elements are fragmented across IM languages, and thus limited in supporting detailed requirement analysis.

Our proposed solution is to combine these two languages into a consolidated modelling language using MBSE language integration technique, in EMF-Ecore, and develop a graphical tool for the new modelling language. The graphical tool is applied on a case study to show that it supports detailed requirement analysis.

Paper B3

Intrusion detection system for detecting the internal threats in 6LoWPAN

Presenter – Anhtuan Le

Abstract

The Internet of Things is gaining research attention due to its wide range of applications in the near future. 6LoWPAN, an IETF standard for integrating the LoWPAN (Low-power and Lossy Wireless Personal Area Network) to IPv6, is rising as a potential technology to bring the IoT vision to real life. Security is a crucial issue for making this standard to be public accepted. However, research on this field is just in the beginning phase. Cryptography techniques have been applied as the first line of defence; nevertheless, due to the weak secure nature of the devices and wireless environment, this line is easy to be broken. Once the attackers compromise the nodes and obtain the keys, they can downgrade network operation without being detected by any cryptography checking. Intrusion Detection System (IDS) is, therefore, needed as a second line defence for monitoring 6LoWPAN operations to raise an alarm if any anomaly happens. The operation monitoring is most efficient when it focuses on guaranteeing the optimised network topology, which represented by RPL (Routing Protocol for Low-power and lossy network) - an underlying protocol for 6LoWPAN; and ensuring a reasonable node performance. Based on this idea, our research includes three phases to employ the IDS to secure 6LoWPAN from the internal threats. First, the prominent internal threats in the network are identified and studied the behaviours. Second, a specification-based IDS for RPL is constructed to secure the optimised network topology. Finally, a Bayesian Inference IDS is designed for monitoring any anomaly in node performance. The detection rates of IDS in phase 2 and phase 3 are tested by the identified attacks in phase 1. The simulations are based on Contiki, a specific simulation and test bed platform for 6LoWPAN.

Paper B4

Fourier-based line segment detection and its application to lane marker detection

Presenter – Payam S. Rahmdel

Abstract

In the wide range of computer vision and image processing problems line segment detection is one of the most primitive and yet crucial headlines. A line segment detection algorithm is investigated in this research to find the endpoints of straight lines within a 2D digital image. An advanced Fourier-based Radon transform has been used to detect the location and the orientation of the straight lines as it has shown a great performance in response to noisy images. Afterwards, a set of windows of interest in the spatial domain is designed in a way that guarantees detection accuracy and eliminates the effect of the superimposing butterfly wings in Radon space. Experimental results on synthetic and real images have shown that the method enjoys superior performance compared with existing similar representative works. The method has been tested in road's lane marker perception as a significant part of a driver assistance system.

Paper B5

A Resource Block Allocation Technique to Mitigate Interference between Femtocell and Macrocell

Presenter – Shahadate Ahmed Rezvy

Abstract

There has been an increasing demand for 3G network providers to improve both coverage and capacity for high data rates, especially for indoor users who suffer from wall penetration losses. One possible way to solve this is using Femtocell (HeNB). It promises substantial gains in spectral efficiency due to an enhanced reuse of radio resources. However, the increased number of cells causing interference is especially an issue when the Macro and Femto layers are in operation. Cross-layer interference is caused by an entity in one layer to an entity which belongs to another layer (for e.g., interference caused by a Femtocell to a Macrocell users). Co-layer interference is caused by an entity to another entity that belongs to the same layer (for e.g., interference caused by a Femtocell to the user of another Femtocell). When the Femtocell and Macrocell are in a dedicated channel mode that means Femto and Macro layers are not causing any intra channel interference to each other. As using dedicated channel needs extra spectrum, so it might not be a good option for many operators. When the Femtocell and Macrocell are in a share channel mode that means Femto and Macro layers are in co-channel or cross-channel mode due to random or uncoordinated deployment of Femtocell on the Macrocell sites cause intra channel interference to each other. This problem occurs due to improper way or without planning channel allocation. This paper proposes a Resource Blocks (RBs) allocation technique to mitigate interference where Macrocell and Femtocell are in co-channel or cross-channel mode.

SESSION C

**9.50am – 11.30am
C109 (College Building)**

**BIOLOGICAL AND
ENVIRONMENTAL SCIENCE**

Paper C1

Endocrine and neurophysiological examination of sleep disorders in Williams syndrome

Presenter – Anna Sniecinska

Abstract

Introduction

A high rate of sleep disturbances has been reported in individuals with Williams syndrome (WS), but the underlying aetiology has yet to be identified. Melatonin and cortisol levels display circadian rhythmicity and are known to affect and regulate sleep/wake patterns. The current study examined levels of the two endocrine markers to explore possible relationship with sleep patterns in children with WS.

The aim of this project is to examine whether sleep disorders observed in individuals with Williams syndrome can be caused by abnormal secretion of endocrine markers such as melatonin, cortisol.

Methodology

Twenty-five children with WS and 27 typically developing (TD) comparison children were recruited. The salivary levels of hormones, due to their circadian rhythmicity, were analyzed at three time points: 4-6pm, before natural bedtime and after awakening using specific enzyme linked immunoassays. Sleep was monitored by actigraphy and parents completed Child's Sleep Habit Questionnaire (CSHQ).

Results

Children in WS group had significantly higher levels of cortisol before bedtime compared to TD controls. Furthermore WS children demonstrated shallower drops in cortisol and less pronounced increase in melatonin at bedtime. CSHQ and actigraphy indicated that children with WS were significantly affected by several types of sleep disturbances including high sleep latency and reduced sleep efficiency, which could be associated with abnormal secretion of cortisol and melatonin.

Paper C2

The Therapeutic Potential of Arsenic Trioxide in the Treatment of Epithelial Origin Cancers

Presenter – Anna Zuk

Abstract

Carcinomas of the cervix and breast cancer are the most common malignancies in both incidence and mortality in women. Recently some studies have claimed that the cause of many of epithelial origin cancers is attributed to HPV infection. More than 99% of cervical cancers contain human papilloma virus (HPV) sequences. HPV viruses that target epithelial tissues have been associated with several other human cancers including breast cancer, vulvar, anal, penile and vaginal cancer and a subset of head and neck cancers. Arsenic trioxide (As_2O_3) is a naturally occurring substance that has been used therapeutically for over 2000 years and received more attention since the discovery of its clinical efficacy in treatment of acute promyelocytic leukemia in the 1990s. More recently the effect of As_2O_3 on HPV associated cancers has been studied revealing its beneficial effects. Mechanisms underlying this process need further evaluation. The focus of this work is to establish the prevalence of HPV infection in breast cancer and to evaluate the possible therapeutic effect of arsenic trioxide in treating both HPV and no HPV associated cancers. The underlying mechanisms through which arsenic trioxide works will be elucidated.

Brest Cancer samples were analysed for the presence of HPV infection. For virus detection in DNA isolated from breast cancer paraffin embedded tissue sections a specific set of primers annealing to HPV L1 gene that encodes major capsid protein of the virus was used. In further PCR analyses primers annealing to HPV E6 genes were used in order to verify whether samples are positive for the high risk HPV 16 and 18 types. So far, preliminary results show that 5 out of 38 breast cancer samples show amplification of HPV L1 gene and 3 of them show high risk HPV16 gene amplification.

To verify the therapeutic potential of As_2O_3 western blotting analyses were applied. HeLa cell line treated with As_2O_3 show reduction in HPV 18 E7 protein expression in accordance with increasing As_2O_3 concentration.

A 3-D *in vitro* model for both cervical and breast cancer was developed to mimic more closely the *in vivo* situation. Preliminary results show that cells grown on DDED manage to grow and form multiple layers for 3-D *in vitro* cervical model and for 3-D *in vitro* model of the breast they were able to form structures that resemble duct or lobule seen in normal breast tissue. A list of markers was used to confirm the reliability of cervical and breast *in vitro* models. In following experiments the proposed models will be employed to evaluate the role of arsenic trioxide in cancers treatment and to investigate underlying mechanisms.

Paper C3

Challenges of Arsenic Speciation in Environmental Chemistry

Presenter – Leonardo Pantoja Munoz

Abstract

The analysis of the distribution of the different forms, isotopic compositions, oxidation states, and the different molecular structures of arsenic in the environment presents different challenges. The challenges in the speciation of surface and groundwater are often only related to the detection limits because only a handful of arsenic species are chemically stable and have importance in water samples. Among biological samples, there is a big difference in arsenic concentrations between marine and terrestrial organisms, this affects the speciation studies because of the need of reference materials that match the specific sample. There is also a large difference in the arsenic species that can be found in marine and terrestrial organisms. There are 50 to 60 arsenic species that have been identified in environmental samples and there is not a single method that can accurately extract and measure all those species at once.

The solutions to those challenges rely on the design/set up of the speciation strategy, being the sample preparation and the separation method the critical steps. A case study for the speciation of arsenic in the green microalgae *Chlorella vulgaris* is explained along with the set up strategy. This design has led to the identification of new arsenic species not reported in the past.

Paper C4

Constructions of flood vulnerability across an etic-emic spectrum

Presenter – Meghan Alexander

Abstract

Academic constructions of vulnerability can be conceptualised across an etic (“outsider”) and emic (“insider”) spectrum. At one end of this spectrum, vulnerability is constructed through measured detachment and typically represented in quantitative, indicator-based research, profiling vulnerability according to socio-demographic characteristics. At this *etic* end of the spectrum, vulnerability thinking is increasingly distanced from the varied contexts in which vulnerability manifests and is experienced by those objectively classified as vulnerable. In contrast, *emic* orientated research is concerned with eliciting this “insider” knowledge and understanding lived experiences. This requires the identification of “insiders”, assumed to be those closest to the issue at hand; however there are a number of variables which influence the level to which an issue penetrates a supposedly homogeneous group of insiders.

This paper reports on completed PhD research examining the positionality of research participants and the degrees of “insiderness” and “outsiderness” evident amongst households objectively classified as vulnerable and at risk of flooding. A mixed methods strategy is employed to assess the influence of this upon residents’ constructions of vulnerability and how this varies within and between the two UK case studies selected for this research. The possibility and appropriateness of defining insider-outsider boundaries is evaluated in the context of whether such distinctions can inform more meaningful assessments of vulnerability at the local scale. Moreover, this paper examines the implications of self-declared (in)vulnerability to provide insights into the barriers and opportunities for enhancing self-reliance and resilience to flooding.

Paper C5

Characteristics of Respondents in Climate Change affected Coastal area in Bangladesh

Presenter – Russel Kabir

Abstract

In recent times mankind is facing the existential threat as climate challenges have become graver. Changes in climate and extreme natural disaster events cause colossal damage to human settlements. Bangladesh is recognized worldwide as one of the high-risk countries to climate change. Due to its geographical location, topography, high population density, poverty and lower adaptive competence it is considered to be highly vulnerable to natural disasters in the world. Climate changes have triggered the increase incidences of natural disasters like cyclone over the coastal region of Bangladesh. The coastal part of the country is the most vulnerable and the southwestern part of the coastal area is identified as environmental handicap by climate change. This study originated from experience of recent super cyclone Sidr that hit Bangladesh in November 2007 and cyclone Aila that hit in May 2009. The study aims to explore the characteristics of the coastal population of Bangladesh. This study was conducted in cyclone Sidr affected Amtali Upazila of Barguna District and in cyclone Aila affected Koyra Upazila of Khulna district. Primary data was collected from households of the affected population by using questionnaire survey. Statistical analyses were carried out to answer the research questions. The study explores the characteristics of the coastal people related to socio-economic, environmental, demographic, water and toilet facilities, natural resources and access to mass media. It further explores the changes observed by the affected people in their area and their knowledge about climate change and its affects on their livelihoods. The study reveals that climate change affects the livelihoods of the coastal people of Bangladesh.

Finally the paper proposes some policy implications and strategies in addressing climate induced natural disasters in Bangladesh.

SESSION D

**2pm – 3.20pm
C207 (College Building)**

PRACTICE BASED RESEARCH

Paper D1

Bridging, Making and Curating Building sustainable interventions

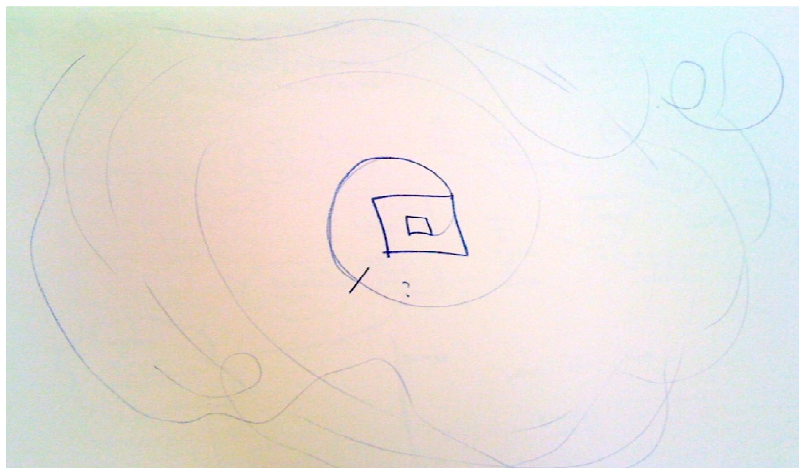
Presenter – Christopher John Goscomb

Abstract

My inquiry is about interventions – that is to say putting forward an idea or observation that is against the prevailing flow or discourse intended to improve or avert a risk. When I started in 2011 I was focused on interventions in the safety arena.

The first phase of the inquiry became about me making an intervention up on myself - and my own recovery from illness. The second has been about dwelling in the space freed up from my continuing recovery to explore the bridge into intervening more widely. The third has been developing practice around how I can intervene with others to free their own latent interventions to an effective and sustainable outcome.

The methodology for my reflections was through the action research cycle (McIntosh, 2010), the practice of auto-ethnography (Muncey, 2010) and the use of artful knowing and making (Seeley and Reason, 2008).



The theoretical underpinnings of the inquiry were woven into the inquiry cycles. The threads came from Foucault's (1980) on Power and Discourse and Weick's (1991) exploration into sensemaking and mindfulness. Lately I have added Bateson's writing on the complexity of the system (2005) and Denzin's work on epiphanic change (1989).

My current work has developed from my practice and I am considering how sustainable interventions can be made.



Figure 2 Intervening through 'Making' in action

My inquiry is exploring how the process of making – physically working with materials can be used to help express ideas and otherwise concealed or repressed ideas and then to explore the act of curating as a way of going beyond presenting the outcomes of intervention.

Paper D2

Exploring the Lifeworlds of Community Activists

Presenter – Chris Erskine

Abstract

This presentation explores the complexity of deliberating, constructing and delivering a doctorate research design that investigated the lifeworlds of community activists. Attention will be first given to the specific research framework used within the four year doctorate study, with the participants being given an overview of the methodology and method actually employed. The fluidity of the research context and design will be considered alongside the researcher's work-based learning environment and interest of anarchic formulations and social movement theory. Following on, focus shall turn to the research structure, which involved two stages – initial interviews and subsequent workshops. Detail shall be given to the way in which an Appreciative Inquiry approach (coupled with a focus upon social movement and anarchic theory) was used with the sample group, allowing the formation of core themes. These themes are then seen to be used as the backdrop in the wider workshop stage(s). It is at this stage that a more critical analysis is introduced via the ideas of Jacques Lacan (1992 etc.) regarding *lack and fantasy*. All of this is seen as concluding in the formation of – Contours of a Community Activists – which feature in the thesis connected with this study.

The second section of this presentation will to explain the journey taken by the researcher in conducting this research. Consideration shall be given to the use of literature and research techniques, alongside the 'choice stages' confronted by the researcher. This aims to challenge the other researchers to the task of producing a

thesis which is original; critically engages my learning; and produces technical and scholarship excellence - McNiff and Whitehead.

Paper D3

Impact of Offender Employment Learning & Skills on re-offending

Presenter – Angela Christopher MBE

Abstract

According to research, employment training and skills give ex-offenders access to employment and thus reduce re-offending. The National Offender Management Service (NOMS) and the Offender Learning and Skills Service (OLASS), which provide education and skills in prisons in England and Wales has aligned its focus to this philosophy which has shaped the direction of offender learning.

This small scale study looked at the prison institution and how NOMS and the Prison Service have been trying to fulfil these policy objectives to reduce re-offending. It raises poignant questions for consideration which may encourage a review of prison education and its purpose and whether employability is the most effective focus.

This research is also an attempt to give the offender a voice and to recommend how that voice can inform policies and how they are carried out. If indicators for reducing re-offending for individuals can be identified the chances of protecting society can be increased. This study has also revealed the lack of the use of data that is systematically collected by the organisation to actively drive change and questions the over-representation of Black Minority Ethnic peoples in prison and why investigations into this have been neglected. Recommendations, based on the findings, address these and a number of other issues.

Paper D4

Paradoxes in practice: - Meaning and experience of receiving traditional western counselling (CWC) compared to culturally sensitive approach (AES) as experienced by HIV sero-positive African migrant women - An Interpretive Phenomenological Analysis (IPA).

Presenter – Agatha Benyera-Mararike

Abstract

African women are most represented service-users of HIV services. Although majority of them suffer from psychological impact of being infected and accepting the diagnosis they are reported to be reluctant to access existing psychotherapy/counselling services, and very little is known about their reasons. One service-user feedback survey shed some initial light. Cultural background has an impact. Although there is a plethora of literature advocating on the importance of culturally sensitive counselling services provision, still scant work relates to HIV-counselling.

Methods

A purposive sampling of a total of 15 women from 2 Arms participated in in-depth qualitative semi-structured tape-recorded interviews. IPA is used as the research methodology appropriate for the study population, research question sample size. Thematic data analysis method was undertaken for the verbatim interview transcription.

Results

Participants explored the barriers to effective helping by comparing the two models. Emphasis was on the significance of positive impact of situation-specific AES counselling provision by a counsellor from a similar cultural background; they felt more understood, compared to CWC with therapist of a different cultural background. What also emerged were tension, links and paradoxes of the African philosophical sense of interdependent self as expressed against the existential anxiety and implications of isolation/aloneness in the context of the impact of HIV diagnosis and inherent stigma emerged. Long term as opposed to time-limited counselling was

preferred. Importance on African heritage and identity was flagged out as a distinct important counselling aspect.

Conclusion

There is need to raise more awareness of intercultural work psychological theories in training to inform psychotherapeutic practice. Research was disseminated to inform BHIVA-BPS HIV psychological treatment policy guidelines and the development of existential psychotherapy and counselling psychology.

SESSION E

**2pm – 3.20pm
C109 (College Building**

COGNITION AND COMMUNICATION

Paper E1

Does scoring first and match venue have an effect on selected action variables and match outcome in professional rugby league

Presenter – Nimai Parmar

Abstract

Introduction

It has been suggested that scoring first can significantly increase the chances of winning in sport (Jones, 2009), and when playing at home teams are more likely to win their games (Alexandros, Panagiotis and Miltiades, 2012). There is currently a paucity of studies analyzing these effects in rugby league, therefore this study aims to investigate the effect of scoring first and match venue on selected action variables and match outcome.

Methods

Opta Sports data collected from the first 13 rounds of the 2013 Super League season, amounting to 90 matches, were processed in Microsoft Excel (v2013, Microsoft, 2013) and analysed using a series of chi-square tests using the IBM SPSS statistics package (v19, SPSS Inc., 2010). Teams were ranked, and selected for this study, based on their league standings at the end of the 13th Round of the 2013 Super League season as being top three (teams finishing in places 1-3), middle eight (teams finishing in places 4-11), and bottom three (teams finishing in places 12-14). Actions analysed in attack were the number of carries, metres gained, line breaks, quick play the balls, completed and incomplete sets. Actions analysed in defence were the number of completed and missed tackles.

Results

Teams that scored first won 71.9% of their games (Chi-square = 51.61, df = 2, $p < 0.001$, phi = 0.538), whereas if they did not score first they only won 20.2% of the time. Similarly, when the effects of match venue were included teams won 77.6% of games when scoring first at home (77.6%, Chi-square = 25.35, df = 2, $p < 0.001$, phi = 0.534) and away (65.0%, Chi-square = 25.35, df = 2, $p < 0.001$, phi = 0.534).

Discussion & Conclusion

This pilot analysis suggests that scoring first significantly increases a team's chances of winning the match, irrespective of match venue. Whilst scoring first is clearly associated with success it may be that factors, which account for scoring first e.g. team strength in comparison to opposition, may account for this strong relationship. Future analysis will include larger amounts of action variables, more matches, and whether the effect is the same when factoring in team and opposition quality.

References

1. Jones, M.B. (2009). 'Scoring first and home advantage in the NHL'. International Journal of Performance Analysis of Sport. 9, 320-331.
2. Alexandros, L., Panagiotis, K. and Miltiades, K. (2009). 'The existence of home advantage in volleyball'. International Journal of Performance Analysis of Sport. 12, 272-281.

Paper E2

Local Perceptual Rate Control in Video Encoding

Presenter – Yetish Joshi

Abstract

Video is ubiquitous and supported by a plethora of devices. This places a burden on (heterogeneous) networks and a search for efficient means to lower the bit-rate for similar image quality.

The distortion metric, a measurement of image quality, in the video encoder chooses the best means to represent a collection of pixels, (Sub)-Macroblock. Typically, a prediction based upon previously encoded (Sub)-Macroblocks is used to represent the majority of the pixels as signalling, leaving only the difference, the residue to be quantised.

During rate-control, this quantisation is dynamically adjusted to meet the target bit-rate. However, it is the distortion metric that ensures that the image quality is maintained.

Currently, the distortion metric accumulates cost uniformly for every pixel difference, not reflecting the nature of the Human Visual System (HVS). The HVS places greater sensitivity to lighter regions and considers object boundaries relative to the surrounding lighting conditions. The HVS represented as a perceptual based model allows for perceptual based redundancy to be identified, and thus lowering the bit-rate for similar perceptual image quality.

However, applying perceptual based models within the distortion metric is computationally expensive as they apply logarithmic functions to fulfil the Triangle Equality Rule. This limits their operation to the frame level unable to assess at the Sub-Macroblock level.

Therefore, this oral presentation will provide evidence of how a perceptual based image quality assessment can satisfy the triangle equality rule, using low complexity techniques at the block level. Before demonstrating a dynamic local perceptual based distortion metric able to adjust based upon the perceptual and bit-budget conditions.

Paper E3

Social Networking for Knowledge Management

Presenter – Ryan Zammit

Abstract

Online social networks have changed the way many communicate and interact. Sharing and communication through this medium has become, for many, a daily habit. Much of these networks provide a simple way to seek and find knowledge and expertise from both friends and even strangers. Through a publicly shared survey we qualitatively analyse the habits of social networking for KM purposes in private lives and also work-related practices. It exposes that private networks are often used as a medium to seek knowledge; both for personal and for organisational motives. Knowledge is flowing through online social networks and knowledge management, and knowledge management initiatives including the resulting systems, stand to benefit from tapping into these new habits. Information Technology has been used in many ways to support knowledge management initiatives with mixed results. Failed knowledge management systems seem to have missed out on the socialisation element, an important aspect highlighted within the famous SECI model for knowledge. It is thus argued that combining knowledge management systems with social networking technology would appear to bridge this gap. Social software is becoming part of a standard arsenal of tools deployed within companies; tools that may help knowledge management. Evidence is exposed through the conduction of a review of relevant literature. An online survey is also conducted. The results corroborate that online social networks, and their enterprise counterparts, are aiding knowledge management initiatives. Findings also include confirming Dunbar's number, and reaffirming the strength of weak ties as originally proposed by Granovetter. This report describes the work in progress and findings so far on the use of social networking technology and habits aiding knowledge management initiatives.

Paper E4

Learning styles and learning approaches in dyslexia: implications for learning support in higher education

Presenter – Nazeida Jhingoor

Abstract

Students with dyslexia (N=47) were compared to students without dyslexia (N=47) on the Felder Silverman Learning Style Model (FSLSM; Felder and Silverman, 1988) to distinguish between their learning style preferences, and on the Revised Study Process Questionnaire (R-SPQ-2F; Biggs, Kember and Leung, 2001) to establish differences in their learning approaches. Comparison of learning styles revealed a greater preference for intuitive learning in students with dyslexia, suggesting that dyslexic individuals express a preference to be innovative, abstract thinkers and to be orientated towards theoretical concepts as opposed to factual information. No significant differences were found between the groups in terms of their learning approaches.

Post-graduates with dyslexia reported a greater preference for intuitive learning than undergraduates with dyslexia. In turn, this latter group reported a deeper learning approach relative to non-dyslexic undergraduates but a more surface learning approach relative to dyslexic post-graduates. A significant interaction for sex x dyslexia reveal non-dyslexic males to be more likely to adopt a surface learning approach compared to dyslexic males and non-dyslexic females.

The results of this study indicate that students with dyslexia in higher education have a preference for processing information intuitively and that the learning approaches they adopt are influenced by their education level. The implications of these results are discussed in relation to learning support in higher education and further studies which will investigate how these expressed preferences may manifest in cognitive behavioural tasks.

SESSION F

**2pm – 3.20pm
C109 (College Building**

SAFETY AND HEALTH

Paper F1

Indo and Afro – Trinidadian women's experiences of help-seeking for domestic violence and somatization disorder

Presenter – Astra Kassiram

Abstract

In Trinidad, negative attitudes towards mental health and unwillingness to access mental health care because of culture and stigma hinder some persons with somatization disorder and domestic violence experiences from seeking help. (Becker & Al Faris, 2002; Hadeed & El Bassel, 2006; Maharajh, 2010; Mai, 2004; Walton & Takeuchi, 2009). This study utilized semi-structured interviews to explore Indo- and Afro- Trinidadian women's experiences of help-seeking for their somatic symptoms and domestic violence experiences. Seven Indo and five Afro- Trinidadian women who had participated in a previous study in which they were identified as experiencing somatization disorder and domestic violence took part in semi-structure interviews. Findings revealed five themes; firstly, many of the women internalized their symptoms and abuse; secondly, some felt their faith was instrumental with helping them to cope with their challenging situations. Thirdly, some of the women expressed that they felt their somatic symptoms and the abuse they experienced were linked and finally, for some of the women there was restoration of self after they left the abusive situation. The findings of this study will be discussed in relation to the impact for policy makers and wider theoretical implications.

Paper F2

Risk Communication as a Strategy to Combat Maternal Mortality in Nigeria: A Case Study in Rivers State

Presenter – Natasha Oyibo

Abstract

Background: Maternal mortality is “*The death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes*”(WHO,1992). It was revealed that between 1980 and 2008, out of 181 countries studied, 6 of them including Nigeria had more than 50% of total maternal deaths. The perception and beliefs of the citizens plays an important role in reducing maternal mortality. In order to effectively tackle the risks of maternal mortality, the continual identification of the key challenges in the management and understanding of this issue is vital. A method of communicating such risks is mental model methodology, it is aimed at restructuring general knowledge, dispelling misconception and adding missing knowledge.

Methodology: The methodology has four distinct phases

Phase 1: Creation of expert model (Preliminary model shown in the figure below)

Phase 2: Semi structured interviews with women to identify misconceptions and gaps in knowledge(Current on-going process)

Phase 3: Structured questionnaire to elicit public knowledge on a large scale

Phase 4: Developing and effective risk communication protocol

Conclusion: This approach is to help both the experts and the public understand the challenging issues brought forth by maternal mortality.

In conclusion, the objective of the communication is to enable better informed decisions, and assist the public to better understand how the risks of maternal mortality are created and controlled.

Hemda, there was a flow chart with this abstract but I couldn't fit it in and wasn't sure if it needed to be included

Paper F3

Decision Making Strategies used by Experts and the Potential for Training Intuitive Skills: A Preliminary Study

Presenter – Justin Okoli

Abstract

There is growing evidence from the literature to suggest that decision making within complex and time-pressured environments involves more than one reasoning strategy. As a result of this, two main modes of thinking have been documented: the intuitive and analytical strategies. In contrast to the normative decision model which prescribes how decisions should be made, the naturalistic decision making (NDM) describes how people actually make decisions using their experience.

This research is particularly relevant for at least two reasons: First, despite arguments that individuals may benefit from switching between intuitive and analytical approaches, there is currently little research agreement concerning the preferred sequence by which these approaches should be employed. Second, although experts have been shown to possess extensive declarative knowledge as well as a more valid intuitive judgment than novices, they however, usually find it difficult to express what they know, especially when such information is required to support the design of training.

Upon these premise, this study is therefore set to achieve the following objectives: (i) to investigate how real experts (fire-fighters) make critical decisions in performing complex tasks (ii) to develop a well structured instructional curriculum/educational framework for training novices. Sixteen expert fire-fighters have been interviewed (out of a sample size of thirty) using the critical decision method (CDM) procedure. Results from the investigation revealed certain tacit (procedural) knowledge and skills they used in performing complex tasks.

Paper F4

Safety Critical Automation and its Organizational Precursors

Presenter – Simone Rozzi

Abstract

The present research has explored the insights that the organizational safety perspective can bring over problems of poor human automation interaction in a safety critical domain such as Air Traffic Management.

Notably, the organizational safety perspective has developed mainly in relation to the analysis of accidents and disasters; however, it has remained relatively underexplored in relation to problems of poor human automation interaction, such as automation induced errors, undesirable usages, and disruption of collaborative work patterns. Operational evidence has shown that these effects can lead to incidents and disasters. These effects have been tackled by theoretical perspectives such as Human Information Processing, Distributed Cognition, Computer Supported Collaborative Work, and Activity Theory. However, these perspectives have focused mainly on the cognitive, contextual and collaborative components of the problem, with little regard for the managerial and organizational ones.

This research consists of two interpretive retrospective case studies inquiring into the organizational implementation and operation of an automated alarm system, called MSAW, from the Air Traffic Management domain. Study 1 has investigated the history of the inter-organizational debate about MSAW improvement actions that has developed between the US Accident Investigation Agency and the US Air Navigation Service Provider and Regulator since the introduction of the alarm in the mid seventies in US. Study 2 has investigated retrospectively the organizational experiences with MSAW implementations as found within four early adopters of the alarm in Europe.

The study has identified the availability of an MSAW specific organizational capability as an important precursor to acceptance and use of the alarm. Such capability includes the presence of a mature tuning process, of a dedicated organizational team

and leadership, of supporting technologies for event analysis and tuning, of senior management commitment, and MSAW specific organizational values. Identified organizational conditions associated to poor MSAW operational acceptance include (i) biased managerial assumptions driving adoption of the alarm; (ii) poor integration between service provider and MSAW manufacturer; (iii) gap existing between the view of the alarm as operated by air traffic controllers and views of the alarm as envisaged by stakeholders at higher organizational levels.

POSTER PRESENTATIONS

3 MINUTE PRESENTATIONS

11.45am – 1pm

C115 (College Building)

POSTER VIEWING

1pm – 2pm

Mezzanine 1 & 2

College Building

Poster 1

Arsenic Chelation, the Meeting of Two Kingdoms

Presenter – Leonardo Pantoja Munoz

Abstract

Natural chelation inside cells occurs mainly thanks to the high affinity of arsenic for sulphur. Molecules containing sulfhydryl groups are known to be chelating agents. This property has been used to artificially chelate arsenic inside the body with molecules such as lipoic acid, Dimercaprol, 2, 3-dimercaptopropane 1-sulfonate (DMPS) and meso 2, 3-dimercaptosuccinic acid (DMSA).

Many mammalian cells (lungs, brain, kidney, placenta, small intestine, blood, etc) are known to chelate arsenic via the formation of complexes with Glutathione GSH ((\square Glu-Cys)-Gly). In addition to this strategy plant cells produce Phytochelatins PC ((\square Glu-Cys)_n-Gly). PC's are oligomers of GSH with additional sulfhydryl groups. Both cells expressed membrane bound specific pumps to transport those complexes. Mammalian cells transport such complexes to the outside of the cell, whereas plant cells transport the complexes to internal vacuoles. These two strategies have been regarded as detoxification mechanisms for arsenic poisoning.

Poster 2

A Resource Block Allocation Technique to Mitigate Interference between Femtocell and Macrocell

Presenter – Shahadate Ahmed Rezvy

Abstract

There has been an increasing demand for 3G network providers to improve both coverage and capacity for high data rates, especially for indoor users who suffer from wall penetration losses. One possible way to solve this is using Femtocell (HeNB). It promises substantial gains in spectral efficiency due to an enhanced reuse of radio resources. However, the increased number of cells causing interference is especially an issue when the Macro and Femto layers are in operation. Cross-layer interference is caused by an entity in one layer to an entity which belongs to another layer (for e.g., interference caused by a Femtocell to a Macrocell users). Co-layer interference is caused by an entity to another entity that belongs to the same layer (for e.g., interference caused by a Femtocell to the user of another Femtocell). When the Femtocell and Macrocell are in a dedicated channel mode that means Femto and Macro layers are not causing any intra channel interference to each other. As using dedicated channel needs extra spectrum, so it might not be a good option for many operators. When the Femtocell and Macrocell are in a share channel mode that means Femto and Macro layers are in co-channel or cross-channel mode due to random or uncoordinated deployment of Femtocell on the Macrocell sites cause intra channel interference to each other. This problem occurs due to improper way or without planning channel allocation. This paper proposes a Resource Blocks (RBs) allocation technique to mitigate interference where Macrocell and Femtocell are in co-channel or cross-channel mode.

Poster 3

Exploration of Stigma towards Mental Illness in Turkish and Greek Cypriot Communities

Presenter – Akile Berfu Zorba

Abstract

Although mental illness is very common and disabling around the world it is also one of the most stigmatized conditions (Maj et al. 2007). Stigma affects every aspects of one's life such as help-seeking, employment and perception of self-worth (Scheffer and Director, 2003).

This study sets out to investigate the attitudes of Turkish and Greek Cypriot populations living in Cyprus towards mental illness. This topic was selected because although there is much research in this field, none has been made in Cyprus which looks into and compares the Northern and Southern populations. Stigma has been found in Greece and Turkey, considering their great impact on the island one would also expect to find stigma in Cyprus. Detailed investigation, however, is needed as the two communities differ in their identity, culture, regulations, education system and available services (Koulidies, 2009). All these factors are associated with stigma and it is unknown how and to what level they may be affecting both communities.

The main question which will be addressed is “does stigma towards mentally ill exists in Northern and Southern Cyprus and are there any differences and/or similarities between the two major societies?” The researcher will be using the mixed methodology approach in order to gain an in depth understanding into this issue. Firstly, an investigation on the attitudes towards mental illness and possible effects of demographic factors which are culture, education, exposure, knowledge, and gender with the use of questionnaires. The researcher will then be investigating the issues arise from the first study with the use of semi-structured interviews.

Poster 4

Sustainable Stormwater Management for Urban Areas in Saudi Arabia

Presenter – Ali Alhamari

Abstract

Flood risk management and water management have grown in importance over recent decades, driven by climatic changes coinciding with urbanization.

Although Saudi Arabia is located within an environment characterised by dry climatic conditions, some Saudi cities have been exposed to short durations of heavy rainfall resulting in sudden surface water flooding. This has had a significant impact, including the destruction of infrastructure, resulting in human, material and economic losses. Key issues that might be contributing to the emergence of this issue in Saudi could be the rapid development of cities and urbanisation; the lack of a storm-water drainage network system covering urban areas; and certain rules and regulations which exist regarding the mechanism of dealing with rainwater and induction to control the path of the water. It is uncertain if the full range of possible flood management measures is being considered in Saudi and the reasons behind this both at a professional and public level.

This research will undertake qualitative and quantitative social research in two Saudi cities affected by continued flood events. In the context of wider flood risk management measures the research will investigate the potential of adopting various types of Sustainable Urban Drainage Systems (SUDS) for urban areas in Saudi Arabia. Through the views of stakeholders the SUDS techniques will be explored to reveal their physical appropriateness and the governance and social contexts that might enable their consideration in Saudi. Indirectly the study also explores issues surrounding undertaking social research in Saudi Arabia.

Poster 5

A Phenomenological Exploration of the Transition by Ex-Army Servicemen between 20-40 Years Old Returning to Civilian Life

Presenter – Ali Ross

Abstract

A friend of mine came back from a tour of duty and something was different about him. Nothing I could place but it was noticeable. I wondered what was going on for my friend and the experiences of many returning soldiers who do not have diagnoses or any other noticeable problems but struggle to make the transition back into civilian life. As an existential psychotherapist I help people to understand who they are in their own way, rather than telling them who they are according to a psychological profile. So my research uses a method of hermeneutic phenomenology as a means of facilitating the ex-soldiers describe their experiences of transition rather than having them 'explain themselves' or be subject to diagnostic labels by 'experts'. I have no hypothesis, I want to help empower ex-soldiers to say if the process of transition in itself is a struggle and if so, in what way.

I hope that by doing so, professionals and civilians around ex-services personnel can better appreciate the subtleties of their transition, helping those personnel to feel permitted to access the support around them. With thousands of service personnel leaving the armed services every year and the imminent redundancies in the MOD, this is a current issue that is in need of more attention. There are journal articles and books aplenty on the training, battle experience and resulting traumas associated with military life but very little about the transition itself and this is a balance I hope to redress here.

Poster 6

'Corporeal dissociation': An investigation into experience of youth and adolescence and exercise uptake in middle age through a life course perspective

Presenter – Anne Elliott

Abstract

This study evolved from a phenomenon observed in personal training practice. Anecdotal reports from clients produced a common theme of experience; that of traumatic experience in adolescence that led to a lack of physical activity participation until middle age when resultant sedentary life style and its associated conditions forced a reconsideration of exercise adherence. This also brought with it a need to find a corporeal re-association in middle age. This was not recognised in clients who had had good physical activity experiences in their youth.

Literature from a range of disciplines will be used to explore the phenomenon in the context of the influence of social environments of youth and adolescence on exercise uptake in middle age and to generate a questionnaire. The study will investigate the nature of the observed phenomenon of 'corporeal dissociation' within in a wider population (than the practitioner client base) using the questionnaire to develop a 'corporeal dissociation' scale and follow up a small number of participants using a 'life course' approach to locate participant experiences within their social context. The aim is to use the findings from the research to develop a practitioner approach to encourage exercise participation and adherence in middle age.

Poster 7

Creating an enhanced and more engaging visitor experience in the museum using novel technologies

Presenter – Ashley J. Wheat

Abstract

Since the introduction of digital technology in museums in the 1960s, the modern museum has evolved from a place where we solely observe objects on display to an environment that allows visitors to have an increasingly engaged, educational, intellectual and enjoyable experience. According to Hawkey (2006), modern museums are “among the most enthusiastic providers of digital learning opportunities”, deploying the use of digital installations, digital media, and increasingly, mobile technologies to provide *edutainment* to their visitors.

However, whilst providing a practical solution in presenting relevant and interactive exhibit information to visitors, current technologies may have a negative impact on engagement with an exhibit. By creating a physical boundary between exhibit information and an artefact, these installations create a conduit by which visitors attention is mediated towards digital content rather than a physical exhibit or artefact itself (Wheat, et al., 2012). Research shows that this use of technology can in fact be obtrusive, distracting visitors from artefacts, which can be an obstruction to a principle goal of the museum: to focus visitor attention on material culture.

This work seeks to develop rich descriptions of museum experiences, by carrying out extensive qualitative user research through the use of experience sampling and journey mapping techniques. By exploring how three factors: social interaction, participation and intrinsic motivation are currently promoted in the museum, it is envisaged that a further understanding of their relationship to engagement can be developed.

By means of the insights provided by this research a number of design prototypes will be developed, aimed at promoting social interaction, intrinsic motivation (playfulness/fun) and participation to inspire more engaging and enriching museum

experiences, by removing the boundary created by current technologies. One such solution will be presented here, which aims to employ the use of Google's upcoming Glass device as a means to provide users with a novel means of interacting and engaging within museum artefacts, dissolving the physical boundary between exhibit information, digital content and physical objects displayed, creating 'digitally enhanced artefacts'.

Poster 8

Impact of prebiotics on bile acid induced colon cancer

Presenter – Bene Afolabi

Abstract

Bile acids are normal components of the luminal contents of gastrointestinal tract but have been reported to cause oxidative damage by stimulating the generation of free oxygen radicals from the mitochondria. Several studies have demonstrated the contribution of reactive species to mutagenesis, carcinogenesis and tumour promotion. There is accumulating evidence to show that some carbohydrates and carbohydrate-containing molecules possess antioxidant ability by inhibiting the production of reactive species. Prebiotics are complex carbohydrates which have been shown to improve gut health when used in combination with probiotics. However, there is paucity of data on how prebiotics alone affect gut health and by which mechanism of action. The reactive oxygen scavenging ability of inulin, a prebiotic, has been shown *in vitro* in non-cell based system and in mice. The anti-inflammatory effect, through production of short chain fatty acids by fermentable inulin has also been shown. However, the mechanism of inulin in the amelioration of bile acid induced cancer remains unknown.

This study hypothesised that normal cells exposed to secondary bile acids in the presence of inulin may be protected from transformation to cancer cells and this may correlate with decrease in production of reactive radicals and pro-inflammatory proteins. The anti inflammatory ability of short chain fatty acid and antioxidant ability of inulin may possibly be associated with AMP-activated protein kinase (AMPK), phosphatidylinositol 3-kinase (P13-K), NF- κ B signalling pathways. Thus inulin and their fermentation/breakdown products may not only stimulate beneficial bacteria in the colon but may directly interfere with absorption and cellular metabolism processes in the colon.

Poster 9

Shifting identities: A mixed-methods study of the experiences of teachers who are also parents

Presenter – Emma Kell

Abstract

This practitioner-based, mixed-methods research explores the influence of parenthood on teacher identity; the challenges involved in combining the roles of teacher and parent, and the benefits of being a teacher-parent. Its originality lies in the combination of teacher-as-researcher perspective, its in-depth approach to an issue only fleetingly alluded to in policy literature, and its emphasis on providing a balance of male and female voices.

The aim of the research is to provide a framework for future policies at local and national level and to provide practical advice and guidance for teacher-parents on maximising well-being and effectiveness in their dual role.

The research investigates the factors, at micro, meso, and macro level that affect teacher-parent identity as discussed in Bronfenbrenner's Ecological Theory (1979), and seeks, through a pragmatic approach, to identify school policies that are – or could be – effective in promoting the well-being and performance of teacher-parents.

The data, based on three secondary schools in the London area, is collected through an innovative and contemporary combination of research methods: focus groups, interviews, questionnaires, and 'netnography'. Online discussion groups provide a wider context for the initial findings.

Ethical factors, such as the role of power and hierarchy within the schools, the multiple roles of the researcher, and the issue of informed consent when dealing with sensitive information relating to minors and colleagues, have been taken into account and are critical to the integrity of the research.

Poster 10

The subjective experience of quality of life in older adults with ASD (autism spectrum disorders) in the UK

Presenter – Frauke Elichaoff

Abstract

Autism spectrum disorder (ASD) has been diagnosed in children in growing numbers since the 1960s. The first generation of individuals with a diagnosis of ASD are now middle-aged. Very little is known about how their needs and experiences differ from those of children and young adults. The National Autistic Society (NAS) together with many leading autism researchers have declared an urgent need for research into the experiences and support needs of adults over the age of 50. This current research will employ a phenomenologically driven mixed-method approach, to enable a detailed insight to the lived experience of being an older adult with ASD. The main research question is 'What is the subjective experience of quality of life in older adults with ASD in the UK?'. This core question is purposely very broad, to allow for in-depth exploration of subjective accounts of experience that will be gathered using a quantitative and qualitative methodology. This will include some questionnaire based Quality of Life measures, combined with semi-structured interviews with participants and key informants. These will be analysed using IPA or narrative analysis. To contextualise these accounts, a Discourse Analysis of current autobiographical literature will be included. Participant recruitment is a sensitive issue, and will be aimed at autism charities and assessment clinics for adults seeking an ASD diagnosis. In order to address the over-arching research question, a number of questions will be asked in a series of studies or in one complex in-depth study that will aim to interrogate different issues associated with being an older adult with ASD.

Poster 11

A Risk Approach to Violence and aggression in Mental Health Institutions: The Impact of stress on Nursing Staff

Presenter – Hevlyen Seenan

Abstract

Introduction

Patient violence is the most dangerous occupational hazard that health professionals must contend with. The number of mental health staff members experiencing violence from patients is on the rise. These attacks may not only cause bodily injury but can also have post-traumatic consequences.

Aim

To investigate the causes of violence and aggression from service users and the contributing factors leading to stress in clinical staff within secure psychiatric settings.

Objectives

- To analyse past incidents and near misses from the incident reporting (IR1) of violence and aggression.
- To examine institutional responses to existing policies and procedures, training available to staff in relation to their safety and the reliability and relevancy of the contents.
- Elicitation of staff experiences of such incidents, the effect that they have and their perceptions of the risk.
- To create a risk mitigation model which applies to violence and aggression.
- To further develop existing risk management and training.
- To make recommendations to improve safety.

Methodology

- Existing data from the Incident reporting system (IR1 form) for a minimum of seven years will be used (secondary data analysis) to analyse past incidents in relation to violence and aggression where the trends and pattern will be observed.

- Data will be collected by asking clinical staff to complete the Management of Aggression and violence Attitude Scale (MAVAS).
- A focus group interview for Selected staff will be conducted with the following selection criteria:
 - Staff who have experienced such incidents.
 - Staff who have a knowledge and understanding of such incidents without having experienced any themselves.
- The research study will adopt a mixed method approach.

The mixed method design will be of type convergent parallel

Poster 12

Identifying the best strategies in raising awareness of Domestic Violence against Women in the BME Pentecostal Communities in the South of England

Presenter – Elizabeth Adegoke

Abstract

Introduction

Domestic violence accounts for between 16% and 25% of all recorded violent crime. (Dobash and Dobash, 1980; BCS, 1998; Dodd et al., 2004; Home Office, 2004)

The UK government's definition of domestic violence is “any incident of threatening behaviour, violence or abuse (psychological, physical, sexual, financial or emotional) between adults who are or have been intimate partners or family members, regardless of gender or sexuality”.

In 1998, Women's Aid (the key national charity working to end domestic violence against women and children in UK) published “Families without Fear” which is their Agenda for Action against Domestic Violence and this has helped to raise awareness of domestic violence both in the media and different organisations.

The BME Pentecostal churches are not taking part in these activities. It appears that there's a cultural barrier preventing the national awareness from having an impact upon these BME communities. From a report on a recent survey of 500 local domestic and sexual violence services there is evidence that specialist services for Black, Asian, Minority Ethnic and Refugee (BAMER) women are particularly undervalued (Women's Aid. 2012)

Aims of the Research

To work closely with Domestic Violence victims and Pentecostal leaders using surveys, focus groups and semi-structured interviews in a BME Pentecostal church in the South of England to:

- Explore the women's perspective on the meaning of Domestic Violence
- Identify the barriers to creating an awareness of domestic violence in the Pentecostal community

- Identify the best strategies by which an effective awareness of domestic violence can be created in the Pentecostal community
- To develop an ethical framework that is suitable for working with victims of domestic violence in this community

Methodological Approach

The approach to this research will be Case Study. Yin (1994) defined Case study as a strategy for doing research which involves an empirical investigation of a particular contemporary phenomenon within its real life context using multiple sources of evidence.

For the purpose of this research non-probability samples will be used and purposive sampling will be adopted.

The population will be women and the sampling frame will be African women attending BME Pentecostal Churches in South London and leaders from BME Pentecostal Communities in London.

Data Collection Methods

Surveys

Focus Group

Semi-Structured Interview

Data Analysis

Analysis for the quantitative aspect of this research will be by coding while the qualitative aspect will be by noting patterns and regularities, positing possible structures and mechanisms which are then firmed up during and after data collection.

Ethical Issues

No deception

Informed Consent

Data protection

No harm to participant

Poster 13

Inquiry ADOC 2011-2014 Citizen Empowerment through Global Business Systems

Presenter – Paul Dickinson

Abstract

How can CDP empower Citizens to help Governments stop climate dangerous change through the Global Business System?

- Carbon Disclosure Project (CDP) is the largest not for profit collaboration working on climate change
- CDP represents 722 investors with assets of \$87 trillion (Global GDP is \$63 trillion)
- 82% of the world's 500 largest companies report through CDP, 70% of S&P500, total over 4,100 companies
- Over 100 cities report through CDP with total population of more than 300 million



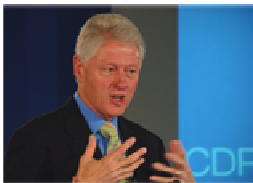
The work of the Carbon Disclosure Project is crucial to the success of global business in the 21st century... helping persuade companies throughout the world to measure, manage, disclose and ultimately reduce their greenhouse gas emissions. No other organization is gathering this type of corporate climate change data and providing it to the marketplace.

Ban Ki-moon, Secretary-General, United Nations



Here, the capital market is of great importance and it is extremely important for investors to take account of climate change in their decision-making. I wish the Carbon Disclosure Project success with its further efforts both in Germany and worldwide.

Angela Merkel, Chancellor, Germany



The Carbon Disclosure Project is vital and we have got to get everyone involved.

Bill Clinton, President, USA



The City of New York joins the world's leading corporations in providing a complete, accurate accounting of its carbon emissions, the strategies it is employing to mitigate those emissions and the results of its efforts through CDP.

Michael Bloomberg, Mayor, New York City, USA



The Carbon Disclosure Project is to the future of business what the X-Ray machine was to the then future of medicine. Without it we would never see the inside of the patient's health.

Christiana Figueres, Executive Secretary, UNFCCC

Poster 14

A retrospective study of path planning for frameless stereotactic neurosurgical operation

Presenter – Rui Hui

Abstract

In the process of a frameless stereotactic neurosurgical operation, path planning plays a very crucial role to ensure the operation is performed safely, precisely and effectively. Currently, a surgical path to the lesion has to be designed by an expert depending on his/her clinical experience. To reduce the difficulty of the path planning and train junior doctors, computer aided path planning system is being developed. This study takes a retrospective approach to investigate the relationship between surgical paths and locations of lesions, which indicates an important parameter for automatic path planning in computer aided path planning system. One hundred patients' data of both MR images and corresponding surgical paths that have been designed to perform the operations for lesions removal are analyzed. All lesions locate in the Sellar region and parasellar region, and surgical paths which once guided real frameless neurosurgical operations are reliable. After measurement and alignment, the coordinate data of each tumour's centre, coordinate data of the path line target and 3 angles of surgical path line were obtained. The classification of the path pattern is carried out within two categories, which are on the left and on the right hand side of the brain with reference to the median sagittal plane. Similarly, all the MR data are divided into 2 groups based on the coordinate data of lesions' centres. With only 8 exceptions, the locations of the centre points on the left of the midline correspond to the right group positioned. Therefore, it can be concluded that the tumours with proximal positions will result in similar surgical path, the assumption that the following work is based upon.

Poster 15

Arsenic biosorption using metal-tolerant fungi isolated from tin-mining soils and the possible interaction between arsenic and tin/antimony

Presenter – Wai Kit Chan

Abstract

Biosorption has been receiving increasing attention as an alternative method to remove heavy metals as it offers many advantages such as high efficiency, low operating cost, minimal usage of chemicals and reduce production of toxic chemical sludge. Fungi are versatile biosorbents as they can tolerate extreme levels of metal, varying nutrient availability, pH and temperature. Arsenic (As) is present in the environment most commonly in the forms of pentavalent As(V), arsenate and trivalent As(III), arsenite. Arsenite inhibits assorted dehydrogenases and is found to be approximately 60 times more toxic than oxidised arsenate. Both antimony (Sb) and As are metalloids which belong to the Group 15 in the periodic table. They possess the same outer orbital electron configuration (s^2p^3) and having similar chemical properties. Hence, these two metals may interact with the arsenic in soils. Previous literature indicates that Sb(III) and As (III) could both be biochemical analogs and are antagonistic to each other. There is a need to understand the interaction between these elements in order to affect effective bioremediation. Previous tin mining activities are known to result in As contamination of soils; in this research, arsenic-tolerant fungi will be isolated from tin-mining soils to examine its biosorption capability and efficiency. The possible interaction between arsenic and antimony or tin will also be studied.

Poster 16

Construction of a Composite Indicator (CI) to measure clients' perspective of quality of care of private veterinary practice in the UK

Presenter – Stephen Posnett

Abstract

A key challenge in veterinary practice is the assessment and promotion of quality of care. It is essential that the views and interests of the major stakeholder, the pet owner or client, is subjected to proper evaluation. There is no typical client, no one typical pet and there is no single way of treating them both. Every client has a different view on the quality of care provided by a veterinary surgeon to their pet.

There is no existing published, well-validated, reliable instrument to measure levels of satisfaction with veterinary care from a client's perspective and none allows the client to indicate which aspects of veterinary care apply to their pets and the perceived importance of each aspect.

I propose the initial formulation of a **Veterinary General Practice Client Survey (VetGPCS)** which will consciously adopt the clients' perspective of the quality of veterinary care to a pet by addressing key areas of primary care activity identified by clients. The end result will be a **CI** of practice performance. The construction of a CI is not straightforward and has had me divert from the comfort of my veterinary discipline to learn about **psychometrics** and **psychology**, involving theoretical and methodological assumptions.

Managing a veterinary practice is not just about caring for clients and their pets' but also about running a successful business. Profit is invested again in training, equipment and premises. I foresee a strong association between high CI scores and practice profit and hence enhanced levels of value and service to clients.

Poster 17

Conscience in recovery from alcohol addiction: Exploring the role of spirituality in conscientious transformation

Presenter – Yordan Zhekov

Abstract

Academic research in alcohol addiction presents diverse results and subject inadequacies. This study identifies conscience and its influence through spirituality on successful recovery as promoting unity and adequacy in the field. The purpose of the study is to analyse the relationship between conscience, spirituality, and recovery from alcohol addiction. This threefold framework underlines the conceptual importance of cognition, affect, behaviour, spirituality, and character in addiction studies. Narrative Analysis (NA) is employed for designing the present research. It is utilised for collection, examination, and formulation of the results derived from the participants' stories. Semi-structured interviews are used within the NA framework to provide the data from the 12 participants. The latter are selected as a homogeneous group based on characteristics of their addiction, spirituality, and recovery. The analysis of narratives defines conscience with its cognitive, emotive, and conative elements as related to spirituality. The conscience's nature and functioning undergo deterioration during addiction and complete rejuvenation through participants' spiritual transformation of a transcendent divine experience. Spiritually empowered conscience supports progressive recovery from alcohol addiction. The conscientious approach to self, life, and others is shaped by virtue and spiritual commitment.

Poster 18

Hyperhomocysteinemia: Implication in insulin resistance in patients with type 2 diabetes mellitus

Presenter – Abdelrouf Ali

Abstract

Introduction: Diabetes and its complications contribute significantly to the morbidity and mortality in the world. Type 2 diabetes is the most common disease worldwide. Insulin resistance is considered as the main factor contributing to type 2 diabetes mellitus. Different substances are implicated in development of insulin resistance; among them is homocysteine, an amino acid which can interrupt insulin signalling pathway leading to insulin resistance. Elevated levels of homocysteine (hyperhomocysteinemia) can be caused by genetic polymorphisms of the genes that encode enzymes involved in methionine metabolism, particularly methyltetrahydrofolate reductase (MTHFR). Hyperhomocysteinemia have been observed in a variety of patients with type 2 diabetes and metabolic syndrome. Some *in vitro* studies have been recently shown that homocysteine thiolactone inhibits insulin receptor tyrosine kinase activity, phosphorylation of phosphatidylinositol 3-kinase, and glycogen synthase kinase-3, leading to inhibition of glycogen synthesis.

Objectives: The study aims to evaluate the relationship between elevated levels of plasma homocysteine and insulin resistance, as well as to establish dietary and genetic factors which may cause or lead to hyperhomocysteinemia in patients with type 2 diabetes mellitus.

Method: Plasma levels of homocysteine, resistin, insulin, and vitamins (B₁₂, B₆, and folic acid) will be measured using Enzyme-Linked Immunosorbent Assay (ELISA). Molecular detection of a mutation (C677T) in the MTHFR gene known to have an impact on the level of homocysteine will be done using a real-time PCR method. An *in vitro* assay will be used where hepatocyte cell lines will be cultured separately in the presence or absence homocysteine, glucose and insulin. PEPCK expression

and phosphorylation of glycogen synthase and glycogen phosphorylase will be assessed using Western Blotting techniques.

Expected outcomes: This study could contribute to the understanding of the role played by homocysteine and MTHFR C677T mutation in insulin signaling in humans and their implications in the pathogenesis of type 2 diabetes. In addition, the possible relationship between the hormone, resistin and hyperhomocysteinemia could be established.

Poster 19

Drink Driving in Lagos

Presenter – Clement Ogeleyinbo

Abstract

The purpose of my study is to investigate the perceptions of law enforcement of the laws on drink driving in Lagos.

How do law enforcement officers perceived their roles in relation to drink driving?

This qualitative study of drink driving in Lagos uses semi-structured interviews to investigate the issues.

Three different groups of law enforcement officer were interviewed for the study. These include 9 Nigerian police officers (NPF), 9 vehicle inspection officers (VIO) and 8 Lagos State Traffic Management Authority officers (LASMA).

I will report on some of my research findings on law enforcement officer's perception of the laws on drink driving and outline what the law actually says about driving under the influence of alcohol in Lagos/Nigeria.

How do they identify drunk drivers?

Identification was a problem due to lack of standard definition of what constitute driving under the influence of alcohol as a result of lack of scientific and technical means to determine when someone was drunk due to lack of official parameter for permissible levels of alcohol consumption for driving.

How do law enforcement officer's responses to drink driving and what actions taken?

The enforcement officers perceived the law to be ambiguous and unworkable without a definition of what is permissible level of alcohol consumption for driving a motor vehicle.

There is an agreement between the three groups of law enforcement authorities that the law need to be change and a standard permissible level set.

This poster will have some photographic image of crashed vehicles.

Poster 20

What are the Causes of Unsafe Practice

Presenter – Jilly Pride

Abstract

Definition of Unsafe Practice:

Unsafe clinical practice has been defined as an occurrence or pattern of behaviour involving unacceptable risk (Scanlan et al 2001)

Unsafe practice is considered to include an act or behaviour of the type which violates the Nursing and Midwifery Council's Code of Professional Conduct (NMC 2008) and Midwives Rules and Standards (NMC 2010).

Outline of work intended to research:

This proposal stems from a professional perspective as a supervisor of midwives, and senior midwife with over 25 years experience in the midwifery profession. I have worked with many midwives who have excelled in their careers, with some who have been investigated for unsafe practice and with others who have left the profession unable to cope with the changes and demands of policy and practice. From these observations, the question remains as to whether the number of midwives leaving the profession due to a high incidence of unsafe practice, or whether there are variations in the proficiency and safety of practitioners.

Ball et al 2002, Why do Midwives Leave, elicited the experiences and perspectives of midwives who had recently ceased to practice – those who had left the workforce. Making the decision to leave midwifery was often a protracted and painful experience for individuals. The largest single group of leavers were those who had become dissatisfied with the organisation of midwifery care and with their role as midwives. There is an increase in the number of midwives being investigated (LSA, 2010-2011). Investigation occurs when it has been identified that a midwife has made an error in practice or found not practising within the Midwives rules and standards (NMC 2013). Some midwives have gone through a period of investigation and subsequently leave, or are referred to the Nursing and Midwifery Council (NMC) and removed from the professional register. However some midwives are able to undertake a successful

supervision programme and continue with good practice, while others who are also successful ultimately leave the profession. I will therefore begin by examining midwifery practices and the many changes over the years that have led us to the current situation. Understanding the complexities within the profession may help us to see more clearly what some of the solutions are.

Poster 21

Exploring health-seeking behaviour among Nigerian migrants in the UK

Presenter – Chineme Onyison

Abstract

Introduction:

The main focus of this research is around cognition and behaviour within the context of health outcome; with a view to understanding the role of religion and culture as triggers/facilitators and or barriers to health services utilization. As people migrate across cultures and contexts, they experience peculiar circumstances that are of public health concern. With migration, significant changes in demographic composition of patient population in the United Kingdom (UK) have resulted to increased awareness on the impact of cultural diversity on health care service provision and access. Hence, health professionals and policy makers are faced with the challenge of delivering adequate health care in a culturally sensitive setting.

Aims:

- (1) Identify the socio-cultural and religious determinants of health-seeking approaches employed by Nigerian migrants in the UK during illnesses/symptoms.
- (2) Explore the role of educational level and professional status on health services utilisation among this group.

Methods

This is a sequential mixed designs strand of 2 stages, following the dominant/less dominant priority of methodological flow (**QUAL**>quan). For data collection, the quantitative approach will use questionnaire while the qualitative approach will use semi-structured interviews through one-to-one and focus group methods.

A total of 11 participants will be selected for the qualitative interview (4 for one-to-one interview, and 7 for the focus group session), while about 1500 participants will be expected to complete the questionnaire.

Objective

This poster presentation is aimed at showing a visual summary of my research, which provides a possible means of future dissemination of outcomes.

Poster 22

StoryLine: A Visual Analytics Environment for Narrative Construction through Timeline Visualization

Presenter – Phong Nguyen

Abstract

Constructing narratives is an integral part of sense making. It allows users to piece together the discoveries made during data exploration and is essential for the reasoning stage that usually follows. Currently, there is relatively less support in Visual Analytics tools or systems for organizing findings into a coherent story, which becomes increasingly difficult as the data size and complexity grow. In this paper, we present the StoryLine environment that is designed to support visual narrative construction using timeline visualization. It targets tasks previously identified important to narrative construction including search results organization, notes taking, and event relationship recognition. Novel interaction and visualization have been implemented to support these tasks, including a story line visualization algorithm that enables interactive narrative construction with seamless integration with visual data exploration. Our preliminary evaluation results show that the participants found the system easy to use and its features effective for narrative construction. As a result, participants' answers are more accurate and complete, and they are more confident about their findings.

Poster 23

When I'm 64 I want to dance! Examples of diagrams and grids assisting thinking processes to create a DProf involving emerging work

Presenter – Jackie Richards

Abstract

My poster diagrammatically illustrates some key thought processes during my DProf journey, enabling me to capture boundaries on multi-disciplinary, evolving work that so easily could become uncontrollable and overwhelming. It includes pictures from the dance organisation I founded/manage, for illumination. It will permit others to critical appraise and share ideas. I wanted my research to include evidence from my own evolving work as well as give voice to older people and their reasons for choosing to dance creatively. After much research and angst, I now have a mixed-methods methodological approach. The poster includes grids with interrelated Venn diagrams with a collation of literature topics. This approach enabled me to identify and cluster emerging main topics:

- The Individual,
- Dance,
- Community and National Issues
- Images and Change
- Work-based Research

I left my full-time career in 2008, wishing to return to dance activities and my local community. My DProf journey began in October 2010. I had low levels of confidence concerning university expectations, my research capabilities and whether emerging work was relevant. Surprisingly, my positionality as an older person, who dances, and a social enabler has propelled me to cutting edges of emerging political and social agendas. There are increasing interests in demographic change, work and leisure patterns, and need for individuals to lead healthy, independent lives, especially at times of increasing austerity. I have enthusiasm and passion to complete my DProf and influencing decision-makers, policy-makers and dance practitioners as well as meeting the requirements of the University.

Poster 24

An exploration of patient centred manual restraint: a phenomenological case study of two NHS mental health inpatient wards

Presenter – Jane Obi-Udejaja

Abstract

Concern abounds regarding the negative effects of manual restraint on both patients and staff. Yet there are situations in the care settings when physical intervention is inevitable and may indeed save life (Paterson 2007). As posited by Steckley in 2008, when physical restraint is used for the right reason and the duty of care is maintained right through the process, both staff's and patient's experience of it can be positive.

The researcher who works within the Middlesex University team that facilitates training on the therapeutic management of violence and aggression for local NHS mental health inpatient staff is working collaboratively with staff from two differently located hospital inpatient wards in order to:

Explore their experiences and perspectives on their implementation of patient centred practices during manual restraint as taught to them. The objectives are:

- To determine whether a patient centred approach to physical restraint is relevant to mental health inpatients in these wards
- To identify barriers to the patient centred practices during physical restraint procedures
- To propose changes if necessary to make the approach sustainable in the setting

Research Question

Are patient centred manual restraint practices relevant and sustainable in mental health inpatient wards?

Data collection

- Focus group interviews were used to collect data from 9 staff from the chosen wards
- Semi-structured interviews were administered on the managers of both wards

Data analysis

The tape recorded interviews were transcribed verbatim. The rich in-depth data is being thematically clustered to facilitate sense making. The findings will be used to inform the training. The study will be written up for publication and for conference presentations.