

The research projects offered to students on the MSc Health Psychology vary each year but typically focus on understanding and/or changing behaviour in the context of health, illness or healthcare. Some examples of projects offered in previous years are listed below.

### Cancer pain management in primary care: patients, clinicians, and their interaction

Pain among patients with cancer is common and impacts on well-being and health care consumption. Despite the availability of effective analgesic medication, cancer pain management can be suboptimal due to poor pain reporting, incorrect analgesic prescription by clinicians, and non-adherence to medication. Very little is known about what the causes of these behaviours are. This project investigates the key drivers of suboptimal cancer pain management.

# Spotting recurrent cancer – how do we enhance effective self-monitoring among patients?

More and more people are living on after potentially curative treatment for cancer. Most, however, are at risk of developing a recurrence which most commonly occurs in the first two years after diagnosis. It is therefore important that patients self-monitor their health to detect potential recurrence. This project uses qualitative interviews and a quantitative survey to identify the key drivers of (un)successful self-monitoring behaviours among patients who have been treated for cancer.

### Using gaming technology to influence food choice

The "Approach Avoidance Task" or AAT is a psychological training tool which requires participants to "push" or "pull" pictures of alcoholic or non-alcoholic drinks towards or away from themselves. Simply "pushing away" the alcohol, and "pulling forward" the non-alcoholic drinks in this task significantly reduced subsequent alcohol consumption in participants. The present project tests the effects of an adapted version of the AAT on participant' subsequent food consumption.

# Exploration of people's experiences of living with Type 1 diabetes for over 30 years

People who have been diagnosed with Type 1 diabetes for several decade have well-established habits and beliefs about their ability to self-manage the condition. These people will be experts in the own condition, however it is unclear whether consultations are designed to best meet their needs. This project uses qualitative interviews with people who have had type 1 diabetes for over 30 years to explore perceived needs and ability to self-manage in this group.

# What are the stresses and strains associated with working as a Community Heart Failure Nurse?

Heart Failure Nurses offer a specialist service and face a number of different demands including educating patients about Heart Failure, achieving optimum medical therapy and monitoring patients. About 40% of people seen by Heart Failure nurses will die within 1 year so much of the work HF nurses do is palliative (e.g. discussing prognosis and end-of-life care with patients). The present project explores how HF nurses deal with these issues with a view to improving support systems around them.

# Illness perceptions following Transient Ischemic Attack (mini-stroke)

Illness perceptions are known to influence coping and subsequent behaviour. TIA leaves individuals at significantly greater risk of subsequent stroke, if recommended behaviours are not adhered too. Yet little is known about illness perceptions of TIA. The purpose of this study is to investigate illness perceptions in TIA patients with a view to better informing future interventions.

### **Ecological Momentary Assessment – open topic**

Ecological momentary assessment (EMA) is a method of collecting relatively-intensive repeated measures of behaviours, symptoms and psychological processes in everyday life. Such data (i) maximises real-world validity; (ii) is rich with information about context (where? doing? who with? etc.); (iii) minimise recall biases; and (iv) can combine real-time self-reports with continuous objective monitoring (activity, heart-rate, etc). This project uses EMA (or N-of-1) methodology to study behaviour, symptoms (e.g., fatigue), and/or psychological processes of interest in real-time.

#### Executive functioning and health behaviour

Executive functioning (EF; i.e. the efficiency of the cognitive processes involved in the planning, execution and maintenance of complex goal directed action) has been repeatedly associated with health behaviour. For example, people with weak executive functioning have been found to be less likely to stick to dietary intentions, adhere to medication, wear sunscreen and be more likely to smoke, eat fatty foods, snack opportunistically, drink to excess and skip breakfast. However, studies to date have typically used single brief tests or self-reports of EF. The present study uses a full neuropsychological test battery to determine which facets of EF are most strongly related to the ability to engage in effortful health behaviours.

### Facilitating healthy menu choices

Food choice is influenced by a wide array of different factors (e.g. price, taste, hunger, etc). The present project investigates whether it is possible to prompt consumers to make a healthier (lower calorie) choice from a restaurant menu by manipulating how menu information is presented, for example, placing the healthiest item first (primacy) or last (recency), adding calorie information to all options (increase information), arranging from lowest to highest calorie (anchoring), labelling the healthiest item as a 'customer favourite' (cueing social norm), etc.

### Cognitive effects of stress in junior doctors in training

As stress is often associated with slips of attention and action, stress in health professionals may be associated with the making of errors that have health-relevant consequences (e.g. prescribing errors). Advances in technology mean that many medical students are now trained using sophisticated simulated patients that can be programmed to emulate different medical conditions. The simulated environment gives a safe but authentic environment in which to explore the impact of stress on performance in health professionals in training. The present project will investigate the impact of perceived stress (stress ratings) and physiological stress (heart rate reactivity) on performance relevant outcomes such as memory, attention and decision making in a sample of 5th year medical students.

#### **Emotional eating**

Emotional eating is defined as the tendency to eat in response to emotional arousal rather than hunger (e.g. when upset, when bored, when happy, etc). An emotional eating style has been linked to higher caloric intake, and in turn to weight gain. This project investigates whether the degree to people eat in response to emotional state is a reflection of deficits in underlying cognitive and / or emotional control.

# Satisfaction and psychological adjustment following body contouring surgery after massive weight loss

Many people who have achieved massive weight loss (with or without bariatric surgery) often experience body image dissatisfaction and seek body contouring surgery. Little is known about the outcomes of this type of surgery in terms of patient satisfaction or psychological adjustment. Patients often have high expectations of improved body image satisfaction but also have a higher risk of post-surgery complications. This project explores satisfaction and adjustment in patients who have undergone body contouring surgery to remove excess skin following massive weight loss.

# What are the stresses and strains associated with working as a nurse on a Cardiology Ward?

Nurses working on Cardiology Wards face a number of different demands. As well as completing their varied nursing duties, they also have to deal with other issues e.g. a large number of beds and moving patients out of the ward to allow other patients to come on to the ward. At present, retention rates are low and wards sometimes function with 50% of the required staff. This project aims to identify the stresses and strains that this group experience with a view to establishing how they could be better supported in doing this work.

# Can first person narratives increase intentions and self-efficacy to engage in healthy dietary behaviours?

Testimonials or 'narratives' (i.e. first person accounts of X from someone with direct experience) have been shown to influence health behaviours and health related decision making (e.g. decisions to be vaccinated; engaging in colorectal cancer screening). This project investigates whether narrative accounts can be used to increase intentions and self-efficacy towards important health behaviours that are applicable to the general population (e.g. fruit and veg consumption, cervical screening, blood donation, etc).

# Health behaviour and different social support qualities

Social exchange processes such as social support and social control are assumed to be beneficial for health and health behaviour. However, the empirical evidence is contradictory. One reason might be that we expect different support qualities from different individuals. For example, we assume that a good friend provides a different kind of support compared to a family member. This study investigates the different qualities of social support from different individuals.

# Do we adequately capture dynamic aspects of symptom experience in daily life?

Recall measures generally ask respondents to indicate a summary of their symptoms or behaviour, which is nearly always linked to the mean average intensity (e.g. "How much fatigue have you felt over the last week?" on a 0-10 Scale). However, symptoms and behaviours are not at all static over time. This project investigates whether symptom experience (e.g. acute changes within short time periods, or exacerbations linked to certain contexts) is more important to patients than mean average symptoms.

### Side effects as cues to effectiveness

Beliefs about the effectiveness of ones' medicine are a strong predictor of adherence. Recent data suggests that side-effects may have unexpected effects on beliefs about effectiveness in that people who experience side-effects appear to develop a stronger belief that the drug is effective and hence are more likely to keep using it. This project uses online drug reviews (E.g., Amazon.com and other sources) to explore how side effects inform people's perception of effectiveness.

### Interpreting survival statistics

Health information is commonly expressed as follows: "Bowel cancer 10 year survival is 56%". This simple statistic tells people little about the survival rates over time. Does the % people alive decline in a linear fashion? Or is there a "convex" decline, whereby most people survive for 7 or 8 years, after which death rate increases rapidly? This project investigates people's intuitions about survival rates, given this kind of information.



#### What is self-efficacy?

The confidence that people feel in their ability to do X has been conceptualised by Bandura as 'self-efficacy', an important predictor of engagement in health behaviour. However, traditional self-report measures of self-efficacy may capture willingness or motivation to engage rather than purely capability ('I would' versus 'I could'). This project investigates participants' interpretation of items from established self efficacy questionnaires to establish the discriminant content validity (DCV) of existing measures.

### Pilot evaluation of the Maggies Centre 'Where Now?' post cancer treatment course

'Where Now?' is a 7 week course created by Maggie's Cancer Centres to help people completing treatment for cancer develop skills and techniques that will support them through the often overlooked transition period from active treatment to life beyond cancer. This project investigates the effect of participating in this course on key health relevant outcomes including diet, physical activity, cancer worry, stress and wellbeing.

### Risk perception in preventing sexually transmitted diseases (STDs)

Whether or not people engage in preventative health behaviours, such as using condoms, can be strongly influenced by the degree they (I) see themselves as being at risk of contracting a disease if the protective behaviours are not performed (perceived susceptibility), and (2) how serious people consider the consequences to be (perceived severity). This project investigates how accurately people estimate their risk of contracting a sexually transmitted disease.

### Shift working patterns and eating behaviour

Compared to individuals who work during the day, shift workers are at higher risk of a range of metabolic disorders and diseases (eg, obesity, cardiovascular disease, peptic ulcers, gastrointestinal problems, failure to control blood sugar levels, and metabolic syndrome). At least some of these complaints may be linked to the quality of the diet and irregular timing of eating. This project examines how shift work impacts on eating behaviour, and identify opportunities and barriers for intervention.

# Evaluating the long-term impact of a 12-week physical activity programme for people living with cancer on fatigue and quality of life

Physical activity is recommended for people living with cancer. Physical activity can help to tolerate cancer treatment and its side effects better, to reduce risk for chronic disease, and to improve fatigue and depressed affect. This project investigates whether cancer patients who participate in a Macmillan physical activity intervention report changes in fatigue and quality of life.

### Young People with Cancer (16-25) Exercise Study

Physical activity is recommended for people living with cancer. However, there are currently few activity programs tailored to young people. This project seeks to adapt an evidence-based activity intervention to the needs of young people by providing tailored, one-on-one behaviour change support to help them become more active.

### Needs of women with fertility problems

Weight loss interventions including calorie reduction improve ovulation and pregnancy rates in women with fertility problems. This project aims to better understand the needs of women with fertility problems and how a behaviour change intervention could address them.

### **Open Topic**

Students with a particular area of interest are welcome to speak to potential supervisors about the feasibility of choosing their own project topic. Projects of this type must align with the research interests and priorities of the Health Psychology Group.

#### Memory bias in recall of health acronyms.

Acronyms are commonly used to help members of the public remember what to do in illness and accident situations. For example, the act F.A.S.T. campaign aims to help people recognise the symptoms of stroke and seek help quickly (Face – has it drooped, Arms – can they raise them, Speech – is it slurred, Time – to call 999). The present project investigates whether people are more likely to remember early rather than late items within these acronyms and whether acronyms which form words related to the target actions are more memorable than others.

# License to indulge: examining the "licensing" effect in the consumption of sugary foods.

"I've worked hard at the gym, so it's fine for me to have that cake when I get home". Licensing is defined as the 'act of making excuses for one's discrepant behaviour before actual enactment, such that the prospective failure is made acceptable for oneself' and this may include heuristics such as "I worked hard today, so I deserve it", etc. The proposed study investigates licencing in the context of discretionary sugar consumption.

### Which processes are relevant for adolescents' medication adherence on a daily base? An n-of-1 observational study.

Asthma affects one in 11 children and adolescents in the UK. Research studies have shown that adolescents in particular may struggle with taking their inhaler medication regularly enough to effectively control their asthma. This project investigates the determinants of young people's medication adherence on a daily base with a special focus on their social environment.

