

March 2015

Welcome to HERU's March 2015 Newsletter.

Welcome to the first HERU Newsletter of 2015. Since our last newsletter our longest standing member of staff, Professor Anne Ludbrook, has stood down as theme leader of the Health Behaviour and Inequality (HBI) theme. Anne will continue to contribute to the theme and we welcome Professor Paul McNamee as the new theme leader. This newsletter provides more detail on the new strategic direction of the HBI theme and we also highlight HERU's activities over recent months.

I hope you enjoy reading our newsletter. Further information is available on our website and you can see more frequent updates on the HERU Twitter page (http://twitter.com/HERU_Abdn).

Professor Mandy Ryan
Director, HERU

Health Behaviour and Inequality theme: new directions

As the new HBI theme leader I would like to inform you about the broadening of our research agenda.

The theme now extends to encompass the topic area of self-management, which considers health behaviour amongst people with pre-existing long-term conditions, and is now developing further work on inequality measurement, and on the causal relationship between health and education.

The theme continues to retain a focus on diet, physical activity, alcohol and smoking and the contribution of inequalities in these health behaviours to inequalities in health, as well as continuing to investigate the influence of time and risk preference on health behaviour.

Projects from within this theme are featured on pages 2 and 3.



HERU's DCE Workshop November 2014

HERU's three-day expert workshop in **Discrete Choice Experiments** ran again in November 2014. This popular workshop is aimed at those interested in the application of DCEs in health economics. It focuses on the practical and theoretical issues raised when applying the technique. The workshop is of interest to those with no or limited experience in the application of DCEs. The November workshop was attended by 25 delegates; five from the EU, four from overseas and 16 from the UK. Delegates included members of academia, the public sector and PhD students.



Delegates and Presenters from the 2014 DCE Workshop

Our next DCE Workshop will be held in November 2015. Please visit our website for information.

Education & Training – Applications currently being accepted for

Health Economics Postgraduate Certificate – Distance Learning

The course is designed for health professionals who want to gain a recognised qualification in health economics.

The course is accredited by the University of Aberdeen and is modular based.

- **Module 1:** Introduction to Economics and Health Economics
- **Module 2:** Economic Evaluation: Principles and Frameworks
- **Module 3:** Economic Evaluation: Applications and Policy
- **Module 4:** Health Care Systems and Policy

To find out more about the course contact our **Course Secretary, Lesley Innes** (l.innes@abdn.ac.uk) or visit <http://www.abdn.ac.uk/heru/courses/pgcert>

MSc Economics of Health

This MSc programme is aimed at students who wish to pursue a career as a professional health economist or who wish to undertake a PhD.

Health economics is typically applied in multidisciplinary settings. This is reflected within the course, providing you with health economics skills alongside generic economic and health service research skills.

The course is taught by experts in the field of health economics and economics, and other internationally recognised specialist staff from health services research and international health.

For further information and details on how to apply see: <http://www.abdn.ac.uk/heru/courses/msc>

Does calorie labelling need the green light? Findings from an eye-tracking experiment

HERU Investigator: Patricia Norwood, Nicolas Krucien, Mandy Ryan, Anne Ludbrook

What is the motivation for this study?

- Information on the nutritional value and content of pre-packaged foods may help to encourage healthier eating patterns.
- Traffic light colour coding (TLCC) displays **red**, **amber** or **green** labels to indicate whether foods contain **high**, **medium** or **low** amounts of key contents such as fat, saturated fat, sugar and salt as well as information on energy (kcal).
- However, the current policy recommendation is for calories NOT to be colour coded.

What is the objective?

To analyse the impact that colour coding calories has on consumer's choices.

What are the methods?

- Pilot study with an opportunistic sample of volunteers (n=36).
- Discrete choice experiment (DCE) to assess how consumers react to TLCC information regarding fat, saturated fat, sugar, salt and calories, as well as price, when purchasing a sandwich.
- Respondents completed the DCE while using eye-tracking software (a device which tracks the location and duration of visual attention using high-resolution, high speed cameras) to better understand how information on TLCC labels is processed.

Does colour coding calories matter?

The heat maps below (red means more attention) suggest participants look at their choice sets in different ways, depending on calories being colour coded or not.

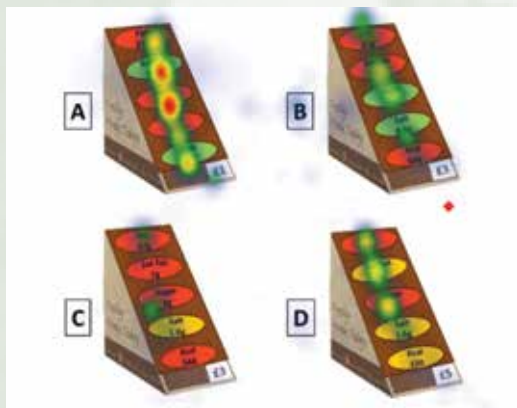


Figure 1: Eye-tracking Heat Map of a DCE choice set with calories colour coded

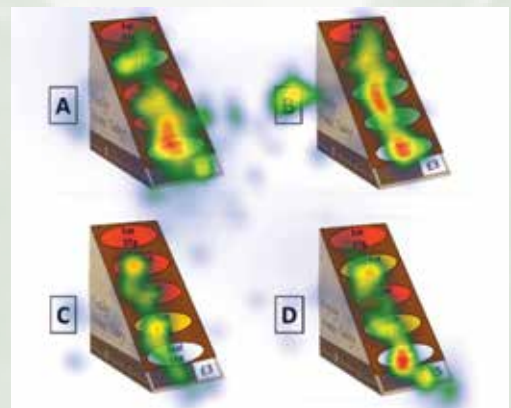


Figure 2: Eye-tracking Heat Map of a DCE choice set with calories NOT colour coded

Main findings

- Colour coding of calories has a significant impact on how consumers look at nutritional information.
- A larger study is now being planned to confirm the initial findings.

For further information please contact Patricia Norwood at p.norwood@abdn.ac.uk

Newly commenced research addressing health inequality

New research underway within the theme includes work by **Yu Aoki** on “Analyses of the causal interactions between health and education”, part of which is funded by the Carnegie Trust for the Universities of Scotland, in collaboration with the Office for National Statistics. The project explores the effect of education and English-language skills on health and fertility outcomes of immigrants in the UK, to inform policy measures that can be used to mitigate educational and health inequalities. Also, **Ramses Abul Naga** commenced work on the measurement of multidimensional inequality in relation to anthropometric definitions of health. The purpose of the research is to provide a unified methodology for the measurement of multi-dimensional inequality, to develop statistical inference tools related to these inequality indices and to evaluate the performance of the developed statistical inference tools using simulation methods.

For further information please contact Yu Aoki at y.aoki@abdn.ac.uk or Ramses Abul Naga at r.abulnaga@abdn.ac.uk

New PhD projects: time preference and self-management

Time preference (how present or future oriented an individual is) is a key parameter in economic models determining investments in a range of outcomes, including health. Two new PhDs that focus on time preferences applied to self-management have just commenced.



Laura Dysart is examining the relationship between time (and risk) preference and self-management of chronic conditions, using both secondary data analysis and primary research. Within self-management the participant plays an active (rather than passive) role in the implementation of tasks that enhance the ability to live well with chronic conditions and that reduce the risk of later complications.



Therefore, self-management is an investment in health because it incurs immediate costs in the expectation of future benefits. This research informs whether risk aversion and time preference are independent predictors of the effectiveness of self-management programmes.



Alastair Irvine is exploring the role of time preference in the doctor patient relationship and the impact on treatment adherence. Studies of adherence in health economics have largely ignored the role that the doctor plays in treatment choice, and whether this process is affected by the preferences of the provider as well as the patient. The extent to which differences between patient and doctor preferences affect treatment choice and adherence are explored, drawing on insights from principal-agent and self-control models. This research informs the design of interventions to improve the self-management of conditions, for example, increasing the salience of future benefits and the use of commitment contracts.

For further information please contact Laura Dysart at r01lmd15@abdn.ac.uk or Alastair Irvine at r01adi14@abdn.ac.uk

Measuring adaptation to chronic conditions using life satisfaction data

HERU Investigator: Paul McNamee

Other investigator: Silvia Mendolia, University of Wollongong, Australia)

The extent to which people adapt to a chronic health condition is important in measuring the effects of policies or programmes designed to maintain or enhance health and well-being. A number of studies suggest that some people adapt to their condition over time due to a re-framing of the problem, that is, over time, people adapt to their condition (a phenomenon also called 'habituation' or 'response shift'). However, what influences adaptation, and amongst whom, is less well understood, although there is evidence that it may differ between men and women.

To shed more light on this issue, we examined whether the impact of chronic pain on life satisfaction was lessened over time through adaptation, using data from the Household, Income and Labour Dynamics in Australia (HILDA) Survey.

We found that the effect of chronic pain did slightly reduce over time, in the sense that people with longer histories of chronic pain reported slightly better life satisfaction than those with shorter durations, all else being equal. However, this masked important differences between men and women. Women appeared to react to chronic pain better than men; women who had chronic pain constantly for the previous 3 years showed more than 70% adaptation, but for men there was no adaptation, with the reverse being found, i.e. those who had experienced the condition for a longer time had poorer life satisfaction.

Speculation on the potential reasons for the results, together with the full findings, can be found in McNamee, P. & Mendolia, S. (2014) 'The effect of chronic pain on life satisfaction: evidence from Australian data', *Social Science & Medicine*, 121, 65-73. doi: [10.1016/j.socscimed.2014.09.019](https://doi.org/10.1016/j.socscimed.2014.09.019)

For further information, please contact Professor Paul McNamee at p.mcnamee@abdn.ac.uk

Profiles of our two new PhD Students.....

Laura Dysart commenced her PhD in January 2015. Her PhD entitled "Applying Economic Methods to Optimise Self-Management" is supervised by Professors Paul McNamee and Marjon van der Pol.



Laura's research will focus on the relationship between an individual's time preference and the self-management of their chronic pain. Laura recently completed her MSc in Health Economics at the University of York and also holds an MSc in Health Research Methodology from McMaster University. She looks forward to contributing to research that will contribute to improvements in the health of Scotland's population.

Alastair started his PhD in October 2014, having completed an MSc Economics at the University of Edinburgh in September. His dissertation was sponsored by the Scottish Government, comparing linear and non-linear time series forecasting.



Alastair's research will focus on the role of time preference in treatment adherence decisions and the doctor patient interaction. He is supervised by Marjon van der Pol and Euan Phimister (Business School). Learning about HERU as part of the Scottish Graduate Programme in Economics, he was excited by the opportunity to apply micro-economic concepts and data analysis to potentially improve patient care.

HERU launch new Policy Brief Series

March 2015 saw the launch of our new Policy Brief Series, replacing our Briefing Papers. The Policy Brief will be a 2 side document highlighting key policy findings from our research. In our first Policy Brief we report research suggesting financial incentives could help reduce obesity.

Available online: http://www.abdn.ac.uk/heru/documents/Policy_Briefs/HERU_PB_March_2015.pdf

Research Support Awarded.....

With colleagues in the Institute of Applied Health Sciences (IAHS) and Centre for Healthcare Randomised Trials (CHaRT), Health Services Research Unit (HSRU) and other institutions we have been successful in obtaining funding for two randomised trials funded by the National Institute for Health Research (NIHR), Health Technology Assessment Programme.



'A multi-centre randomised controlled trial comparing laparoscopic supra-cervical hysterectomy with second generation endometrial ablation for the treatment of heavy menstrual bleeding (HEALTH)'. This trial will run for 45 months with funding of

£1,331,697 from Department of Health, NIHR, HTA. Grant holders include: S Bhattacharya, J Norrie, N Scott, and K McCormack and **G Scotland**.



'Multi-centre controlled trial of the effectiveness and cost effectiveness of basic versus biofeedback-mediated intensive pelvic floor muscle training for female stress

*or mixed urinary incontinence (OPAL) - Optimal PFMT for adherence long-term'. This trial secured funding of £1,970,785 from Department of Health, NIHR, HTA via University of Glasgow. The Co-Applicant from HERU is **M Kilonzo**.*



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