# Hannes Titeca

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A PhD qualified researcher with a background in behavioural and experimental economics. Extensive experience of research and analysis through leading on all aspects of multiple research projects. This includes study/research design, execution/data collection (including experiment/survey design, programming and roll-out), data analysis, reporting/data visualisation, and communicating insights to internal and external stakeholders. This experience being gained through academic research, whilst on secondment to the Civil Service (at the Department for Work and Pensions) and whilst working at Kantar Public/Verian's Behavioural Practice (a behavioural science research agency working with government and other public sector clients).

## **Employment and Positions**

Research Manager (Behavioural Practice), Verian (formerly Kantar Public), London. 2023

- Managing and contributing to several behavioural research projects concurrently, ensuring efficient, profitable, high-quality project delivery.
- Writing up evaluation methods (including field based randomised controlled trials, regression discontinuity designs and difference in difference) for proposals, protocols and reports in a persuasive and well-reasoned way that followed current literature and guidance, such as the Magenta book (HM Treasury's guidance on evaluation).
- Contributing to research design discussions.
- Quantitative/statistical analyses including regression analysis and power analysis/simulation (using R and Excel) for online and field trials/experiments (including multi-level modelling).
- Working to tight deadlines and managing multiple demands.
- Preparing/delivering reports and presentations for varied senior (non-technical) audiences and publication on GOV.UK.
- Working with stakeholders, including acting as the key contact for clients and leading client meetings.
- Forming working relationships with stakeholders in order to set up and conduct qualitative stakeholder interviews to gain qualitative insights and refine/develop theories of change.

Lecturer in Economics (Education and Scholarship), University of Exeter. 2021 - 2023

- Module lead and tutor for the second/third year undergraduate module, Behavioural Insights for Business and Management (BEE2042) and first year module, Personal Finance (BEE1040). This involved setting the curriculum for the modules, teaching all classes and setting/marking assessments.
- Tutor for the modules; Behavioural Economics: Theory and Practice (BEE3069), Behaviour, Decisions and Markets (BEE3049), Game Theory (BEE2044), Microeconomics II (BEE2025) and Economics I (BEE1036).

- Supervising students completing undergraduate dissertations in the area of behavioural/experimental economics (BEE3068). This included supervising several research projects that make use of (online) experiments and/or surveys.
- Supervising students completing dissertations for the MSc Money, Banking and Finance programme (BEEM124).
- Pursuing research interests in behavioural/experimental economics and applied microeconomics.
- Member of the organising committee for the 2023 European Economic Science Association (ESA) Conference held in Exeter in September 2023.

Postgraduate Teaching Assistant, University of Exeter.

2016 - 2021

- Module lead/lecturer and sole tutor for MSc level Microeconomics (BEEM101J).
- As an Outreach / Widening Participation Ambassador (2017-2019); leading interactive
  taster sessions in Business and Economics with secondary school students, either on
  campus or at the students' school. This often involved developing new materials
  including a self-contained resource box on "Behavioural Economics and Strategic
  Interactions The Commons Game" that is now also used by local school teachers to
  deliver the planned session themselves.
- Teaching assistant/tutor for several modules, see additional details in the section below.

PhD Secondment, The Department for Work and Pensions, London. February - May 2019

- Secondment to the multidisciplinary "Claimant Behaviour & Insight Team" within the Counter Fraud and Compliance Directorate.
- Applying behavioural theory/science and developing behavioural interventions with the aim of preventing fraud and error across the benefits system at system, staff and customer levels.
- Longitudinal data analysis using large administrative datasets (using SAS, SQL and Excel).
- Presenting policy relevant insights to internal (non-technical) audiences.

### Education

Cambridge Spark. Skills Bootcamp in Data Analytics (Level 4, DfE funded). 2024 - Present Content includes processing/analysing data using Python/Pandas/SQL and data visualisation.

University of Exeter. PhD in Economics.

2016 - 2022

Thesis title: A closer look at cooperation: What factors influence non-strategic cooperative behaviour? Advisors: Prof. Brit Grosskopf, Dr Sebastian Kripfganz & Prof. Rajiv Sarin.

University of Exeter. MSc Economics (Distinction).

2015 - 2016

School Commendation for Academic Performance.

Maastricht University. BSc Economics and Business Economics,

2012 - 2015

Economics specialisation. GPA: 8.61 / 10, Cum Laude (With Distinction).

University of California, Santa Barbara. Exchange semester.

2014

GPA: 3.75 / 4, Dean's Honors.

# Teaching Experience as Postgraduate Teaching Assistant at the University of Exeter

Financial Markets and Decisions I (BEE2027) Undergraduate Year 2. Lecturer: Joerg Weber.	2021
Economics for Management (BEE1034) Undergraduate Year 1. Lecturer: Ben Zissimos.	2020
Game Theory (BEE3018) Undergraduate Year 3. Lecturer: Todd Kaplan	2020
Behavioural Insights for Business and Management (BEE3064) Undergraduate Year 3. Lecturer: Jingnan (Cecilia) Chen.	2018 - 2020
Economics of Management Strategy (BEE3027) Undergraduate Year 3. Lecturers: Jingnan (Cecilia) Chen & Luke Lindsay.	2017 - 2018
Behaviour, Decisions and Markets (BEE3049) Undergraduate Year 3. Lecturer: Miguel Fonseca.	2017, 2020
Microeconomics I (BEE1030) Undergraduate Year 1. Lecturer: Luke Lindsay.	2017
Microeconomics II (BEE2025) Undergraduate Year 2. Lecturers: Surajeet Chakravarty & Simone Meraglia.	2016 - 2018

#### **Publications**

"Use of Statical Process Control in Quality Improvement Projects in Abdominal Surgery: a PRISMA Systematic Review." Lima de Mendonca Y, Sarto R, Titeca H, Bethune R, Salmon A. BMJ Open Qual. 2024 Feb 1;13(1):e002328. doi: 10.1136/bmjoq-2023-002328. PMID: 38302467; PMCID: PMC10836379.

Abstract: Background: The use of quality improvement methodology has increased in recent years due to a perceived benefit in effectively reducing morbidity, mortality, and length of stay. Statistical process control (SPC) is an important tool to evaluate these actions, but its use has been limited in abdominal surgery. Previous systematic reviews have examined the use of SPC in healthcare; but relatively few surgery-related articles were found at that time.

Objective: To perform a systematic review (SR) to evaluate the application of SPC in abdominal surgery specialties between 2004 and 2019.

Methods: An SR following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses flow diagram was completed using Embase and Ovid Medline with terms related to abdominal surgery and SPC.

Results: A total of 20 articles were selected after applying the exclusion criteria. Most of the articles came from North America, Europe, and Australia, and half have been published in the last five years. The most common outcome studied was surgical complications. Urology, colorectal and paediatric surgery made up most of the articles. Articles show the application of SPC in various outcomes and the use of different types of graphs, demonstrating flexibility in using SPC. However, some studies did not use SPC in a robust way and these studies were of variable quality.

Conclusion: This study shows that SPCs are being applied increasingly for most surgical specialities; however, it is still used less than in other fields, such as anaesthesia. We identified conceptual errors in several studies, such as issues with the design or incorrect data analysis. SPCs can be used to increase the quality of surgical care; the use should increase, but critically, the analysis needs to improve to prevent erroneous conclusions being drawn.

"Healthcare Spending: The Role of Healthcare Institutions from an International Perspective." *MaRBLe*, *2*, 2016.

Abstract: Healthcare systems differ greatly across the world, however, it appears that the extent of public insurance (publicly/government funded healthcare) is the only institutional characteristic that plays a significant role in accounting for the large disparities in total healthcare spending. Other factors, such as whether healthcare services are provided by the private or public sector, play much less of a role, highlighting the important distinction between how services are provided and how those services are funded. A regression analysis is conducted utilising an existing categorisation of the predominately high-income countries of the OECD in 2009. It is found that more public insurance and less private insurance is associated with significantly lower spending after controlling for differences in income through GDP and healthcare quality/outcomes through life expectancy. This result is robust to the inclusion of additional controls for lifestyle factors and the proportion of the population aged 65 and over, as well as the inclusion or exclusion of the US that could otherwise be seen as some kind of outlier. A typical country relying largely on private provision and insurance, such as the Netherlands, Germany or the US, could reduce total healthcare spending by around a third by moving to a system with extensive public insurance whilst retaining extensive private provision of services, a situation typical of some countries such as Austria, Greece and Japan.

**Other Research Papers** (see my website for the latest versions, also includes screenshots of programmed experiments: hannes-titeca.github.io)

"Testing for exposure effects and guilt aversion in a public goods game".

Abstract: Exposure effects are related to knowing that one's choice will be observed by others or that you will observe the choice of others ex–post. For example, a "shame averse" individual would contribute more to a public good when they know that they will be observed. This is distinct from guilt aversion where an individual experiences disutility simply from failing to meet the expectations of others. The guilt aversion hypothesis therefore predicts a positive correlation between cooperative behaviour and second order beliefs (what one believes others expect one to do). A one–shot, two–player public goods game is used to test predictions using a 3 x 2 between–subjects design. The experiment is conducted online using a sample more representative of the general population than typical lab studies. To avoid any potentially confounding consensus effects in the analysis, beliefs are exogenously manipulated at the treatment level through either a low or high contribution norm signal presented to subjects at the point they make their choice. It is found that there are significantly fewer contributions at zero (free–riding) when it is known that one will be observed ex–post, i.e. "shame aversion". The level of contributions at an aggregate level is however relatively unaffected. Additionally,

varying the norm signal does indeed shift beliefs and contributions in the direction of the signal, even when one's choice will not be observed. This providing strong and robust evidence in support of the guilt aversion hypothesis.

"Do I care what you think of me? Varying observability in a public goods experiment".

Abstract: In social dilemmas the level of observability by others often differs, either by design or by coincidence, and it seems intuitive that this might affect prosocial behaviour. For example; the potential for negative emotions such as guilt or shame may be greater when behaviour is more easily observed by others. A lab-based experiment with a 3 x 1 between—subject design is used where the level of ex-post disclosure/feedback others receive is varied in an, anonymous, one—shot, two—player public goods game. Incentivised first order beliefs (what a subject believes their partner will contribute) and second order beliefs (what a subject believes their partner expects them to contribute) are directly elicited. A within—subjects analysis, mitigating any consensus effect concerns (people believing that others think and act like them), finds that at least some people are "shame averse"; when able to be observed expost, there is a stronger response to their second order belief of what they believe their partner expects. The same analysis also finds robust evidence for guilt aversion which is possible even when there is no observability by others. When available, receiving information on the average past behaviour of others has the effect of reinforcing any shift in the observed average behaviour.

"Bribing to queue jump: Experiments on negative time externalities and legal alternatives", with Lutfi Rahimi.

Abstract: With petty corruption being widespread in many countries this paper uses simple experiments to explore some of the behavioural determinants of bribery. We look at a bribe that allows people to "jump the queue" and receive service delivery sooner. In the experiments this corresponds to participants receiving their payment today rather than waiting up to 22 days for payment. As in the real world, such as bribe may have a negative time externality in the sense that others are "pushed down the queue" and must wait even longer for service delivery. Two experiments are conducted online using a broad sample from countries with medium to low incomes and we find that both citizens and officials choose/accept a bribe less when there is a negative time externality. Citizens are also less likely to choose a bribe when a more costly (legal) "fast track fee" is available that delivers the service in the same time as when paying a bribe but has no negative time externality. In addition, incentivised beliefs are found to be strongly correlated with behaviour.

### **Awards and Recognitions**

ESRC 1+3 studentship, University of Exeter, MSc and PhD fees/stipend. 2015 - 2019

School Commendation 2015/16 (for academic performance in MSc). 2016

MaRBLe journal inclusion, Maastricht University. 2016

Bachelor thesis selected as one of best research papers and published in the journal.

Honours and MaRBLe Programme, Maastricht University. 2014 - 2015

Host guest academic speakers as part of honours colloquium, take additional courses and extended thesis during final year.

#### **Conference and Seminar Presentations**

2020

Economic Science Association (ESA) Global Online Around-the-Clock Meeting.

Exeter Economics Postgraduate Research Conference.

2019

European ESA Meeting, Dijon, France.

Tax Administration Research Centre (TARC) Brown Bag Seminar, Exeter.

19th Society for the Advancement of Economic Theory (SAET) Conference, Ischia, Italy.

Exeter Economics Postgraduate Research Conference.

10th Southern Europe Experimental Team's Meeting (SEET), Ibiza, Spain.

2018

13th Nordic Conference on Behavioural and Experimental Economics, Odense, Denmark.

Exeter Economics Postgraduate Research Conference.

3rd Workshop on Psychological Game Theory, Soleto, Italy.

ESA World Meeting, Berlin, Germany.

9th SEET Meeting, Lecce, Italy.

2017

Changing Lives - Changing Worlds Graduate Conference, Bath.

University of East Anglia (UEA) Summer School on Psychological Game Theory, Norwich.

Exeter Economics Postgraduate Research conference.

Exeter Behaviour, Identity and Decisions Cluster Seminar.

#### **Conferences and Workshops Attended**

2019

South West Doctoral Training Partnership (SWDTP) student conference, Exeter.

2018

2nd Summer School on Psychological Game Theory, Soleto, Italy.

GW4 Collaborate and Communicate, Bristol.

South West GRADSchool Residential Course, Wales.

Experimetrics – PhD Summer School, Norwich.

SWDTP student conference, Bristol.

2017

Cultural Transmission and Social Norms 2, Norwich.

Exeter Prize Workshop.

GW4 Creativity and Teamwork, Bristol.

M2D 1st Annual Conference on Decision Making Under Uncertainty University, Exeter.

2nd Workshop on Psychological Game Theory, Norwich.

Mini Course on Behavioural Finance, Exeter.

IMPACT Network Workshop on Urgent and Emergency Care, Exeter.

Economic and Social Research Council (ESRC) student conference, London.

10th Maastricht Behavioral and Experimental Economics Symposium (M-BEES) and Maastricht Behavioral Economic Policy Symposium (M-BEPS), Netherlands.

SWDTP student conference, Bath.

2nd Exeter Workshop on Macroeconomics and Banking.

Institutions and Cooperation Workshop, Exeter.

Royal Economics Society Symposium of Junior Researchers, Bristol.

2016

South West Doctoral Training Centre (SWDTC) student conference, Exeter.

Exeter Prize Workshop.

Learning and Teaching in Higher Education (LTHE) Stage 1, Exeter.

Graduate teaching assistant training, Exeter.

# **Academic Refereeing**

Journal of Behavioral and Experimental Economics, Journal of Economics & Management Strategy, Theory and Decision, Homo Oeconomicus.

# **Proficiencies**

Data analysis (including regression, parametric, non-parametric and time series), Research design, Data visualisation, Survey design, Experiment/intervention design, Stata, R, oTree (including use of the framework within Python and associated HTML), z-Tree, Latex, Microsoft Office (including Word, PowerPoint and Excel), Online experiments, Laboratory experiments, Field experiments, Randomised controlled trials (RCTs), A/B testing, Project management.

### References

Available on request.