



PROGRAM

SYMPOSIUM

Rewarding Healthy Behavior Change:

**Theoretical Insights and
Practical Applications**

Rewarding healthy behavior change is a key factor that can improve adherence to a healthy lifestyle and improve health outcomes. This symposium, organized by Leiden University, aims to bridge the gap between theory and practice by sharing both academic and industry insights. The invited speakers will share their knowledge and experience on tailoring financial incentives to individual needs and using financial incentives as commitment devices. Furthermore, they will discuss whether financial incentives can be more effective when participants' own money is at stake and whether it is a good idea to use financial incentives to promote uptake of the COVID-19 vaccine.

Dutch:

Het belonen van gedragsverandering is een belangrijke interventie die kan bijdragen aan een gezonde levensstijl en een betere gezondheid. Dit symposium, georganiseerd door de Universiteit Leiden, heeft tot doel de kloof tussen theorie en praktijk te overbruggen door zowel academische als praktische inzichten over beloningen voor gezondheidsgedrag te delen. De uitgenodigde sprekers zullen hun kennis en ervaring delen over het tailoren van financiële prikkels op individuele behoeften en het gebruik van financiële prikkels als stok achter de deur. Verder zullen ze bespreken of financiële prikkels effectiever zijn wanneer het eigen geld van de deelnemers op het spel staat en of het een goed idee is om financiële prikkels te gebruiken om de opname van het COVID-19-vaccin te bevorderen.





15.00/15.15 Opening of symposium Andrea Evers/Jamie Rosen/David de Buisonjé

Theme 1: Tailoring of financial incentives

15.17/15.29 **Stefan Lipman** (Erasmus University, Rotterdam)

One size fits all? Self-tail oring of hypothetical financial incentives to individual preferences

15.34/15.46 **Nienke Boderie** (Erasmus Medical Center, Rotterdam)

Practical implementation of PERsonalised Incentives for Supporting Tobacco cessation, experiences from the PERSIST trail

Theme 2: Improving COVID-19 vaccination uptake

15.55/16.07 **Noel Brewer** (University of North Carolina)

What works to increase vaccination uptake?

16.12/16.24 **Gale Burstein** (Department of Health, Erie County, New York)

Creative approaches to increasing COVID-19 Vaccination uptake

Theme 3: Financial incentives as commitment devices

16.47/16.59 **Koen van der Swaluw** (RIVM, Bilthoven)

Commitment lotteries for gym attendance and smoking cessation at the workplace

17.04/17.16 **Jeroen Kemperman** (Zilveren Kruis Achmea, Leiden)

Nudging and rewards for behavior change & losing weight with a precommitment

Theme 4: Deposit contract financial incentives

17.25/17.37 **David de Buisonjé** (Leiden University)

Theoretical and practical advantages of deposit contracts & results of several field experiments

17.42/17.54 **Jamie Rosen** (WayBetter, New York)

Lessons learned from developing and implementing StepBet

18.01/18.15 Closing of symposium

Stefan Lipman

Erasmus University Rotterdam
Netherlands



Dr. Stefan Lipman holds a M.Sc. in Social and Health Psychology from Utrecht University, and completed a Ph.D. in Health Economics in 2020 at Erasmus University Rotterdam. His dissertation research focused on applying insights from behavioral economics to understand and improve decision-making in health. In that context, he has applied behavioral insights in a wide array of context, for example: measurement and valuation of health, risky decision-making, intertemporal choice and the use of financial incentives. He has a keen interest in understanding differences between individuals' decision-making tendencies. Currently, Stefan is employed as assistant professor at Erasmus School of Health Policy & Management.

Noel Brewer

University of North Carolina
US



Dr. Noel T. Brewer is Professor of Health Behavior at the Gillings School of Global Public Health at the University of North Carolina. His research explores why people engage in vaccination and other health behaviors that prevent cancer. He has advised on vaccination for the World Health Organization, Centers for Disease Control and Prevention, the President's Cancer Panel under two presidents, and the National Vaccine Advisory Committee. Dr. Brewer co-edited the FDA's book, *Communicating Risks and Benefits: An Evidence-Based User's Guide*. Media coverage of his research includes the BBC, New York Times, Wall Street Journal, and CNN.

Speakers

Nienke Boderie

Erasmus Medical Center
Rotterdam, Netherlands



Nienke Boderie obtained her master degree in health sciences in 2019, with a specialization in public health. She continued her academic career and started as a PhD candidate within the Smarter Choices of Better Health Initiative. Nienke's main project is the PERSIST trial in which the effect of personalised incentives on sustained abstinence is investigated. Furthermore, she works on projects related to smoking cessation and socio-economic differences.

Gale Burstein

Department of Health, Erie County
New York, US



Gale R. Burstein, MD. MPH, FAAP is the Erie County commissioner of health, pediatrician, co-chair of the Erie County Opiate Epidemic Task Force and leads Erie County's COVID-19 pandemic public health response. She has served as a Centers for Disease Control and Prevention medical officer, has held numerous clinical, research and teaching positions. Dr. Burstein has published articles in many scientific peer-reviewed journals, specializing in adolescent medicine and sexually transmitted infections.

Koen van der Swaluw

RIVM

Bilthoven, Netherlands



Van der Swaluw (PhD) is a researcher and project leader at the crossroads between behavioral economics, health economics and psychology. He works at the Department of Health Economics, at the Dutch Institute of Public Health and the Environment (RIVM). His main field of interest is the use of behavioral science to improve health, sustainability and safety in practice. Van der Swaluw designs and manages multiple field experiments aimed at disease prevention, sustainability and safety through behavior change. Virtually all his projects are collaborations with community organizations (e.g., employers, businesses, doctors). Next to research, he also formally advises the Dutch government on the behavioral and communication aspects of combating the coronavirus (e.g., policy and press conferences). He is the founder of the Dutch platform for behavioral economics: www.gedragseconomie.nl.

Jeroen Kemperman

Zilveren Kruis Achmea

Leiden, Netherlands



Jeroen Kemperman has been working for Achmea since 1998 in a range of senior management functions. These were all related to strategy, marketing, business development, product management, mergers, change management and innovation. In his current role he is responsible for strategy and business development for the Health division of Achmea (Zilveren Kruis). This is the largest health insurer in Europe. Jeroen has jointly with co-authors also written 6 books on management and businesses with case-studies on 95 businesses., including 'Brilliant business models in Healthcare'. He is besides an author also active as speaker in The Netherlands and internationally.

Speakers



David de Buisonjé

Leiden University

Netherlands



David de Buisonjé holds a Master in Social Psychology and a Bachelor in Architecture. After working for two years as a behavioral scientist for digital health startup Selfcare, David decided to pursue an academic career. In September 2017 he started as a PhD candidate at Leiden University. His dissertation is part of the BENEFIT project in which cardiologists, neurologists, general practitioners, academics, entrepreneurs and patients have joined forces to make healthy living fun. Instead of telling people how to behave, BENEFIT makes a healthy lifestyle more attractive: the carrot is mightier than the stick. Within the Benefit project, David focuses on the combination of digital technology with a financial incentive system for sustainable lifestyle change.

Jamie Rosen

WayBetter

New York, US



Jamie Rosen is the Founder & CEO of WayBetter, a startup that uses gamification, social support, and financial incentives to motivate people to change health-related behaviors. Since 2013, WayBetter has had over a million paying customers and paid out over \$125 million to its winners. Jamie is also co-Principal Investigator for a \$1.2 million NIH grant to develop a game to quit smoking. Earlier in his career, Jamie dropped out of Harvard Business School to launch Comet Systems, which was acquired for \$33.5 million. He also sold several patents to Yahoo! He graduated from Harvard College and was a Lemelson Fellow in Innovation, Invention, and Creativity.

Theme 1:

Tailoring of financial incentives

One size fits all? Self-tailoring of hypothetical financial incentives to individual preferences

Stefan Lipman

By now it has been established that financial incentives can help to promote short-term behaviour change in many different contexts. Insights from behavioral economics have been used to design such financial incentives of various forms, such as deposit contracts and lottery incentives. These incentive designs are assumed to be effective because individuals, for example, are loss averse or assign large importance to rewards with low likelihood. Although such behaviourally inspired incentives are generally effective, it is not exactly clear why and for whom. In particular, empirical research has shown that risk attitudes and loss aversion are highly heterogeneous. Very few studies have explored how this heterogeneity in the phenomena that motivate financial incentive designs actually impact their effectiveness. In this talk, Stefan will present the results of a project in which individuals were asked to design their own incentives. Afterwards, (inter alia) loss aversion and time and risk preferences were elicited. Surprisingly, the incentives individuals designed were not at all associated with measurements of their economic preferences. This finding has several conflicting explanations.

Practical implementation of PERSONALISED Incentives for Supporting Tobacco cessation, experiences from the PERSIST trail

Nienke Boderie

From theory to practice – how to implement personalized incentives in a smoking cessation program? In this talk Nienke Boderie will discuss lessons learned from the PERSIST trial. She will focus on participant experiences but also on the challenges and possibilities for implementing personalized incentives for behavior change.

Theme 2:

Improving COVID-19 vaccination uptake

What works to increase vaccination uptake?

Noel Brewer

The Increasing Vaccination Model is used globally to understand and intervene to increase vaccination uptake. Dr. Brewer will present the model and review the empirical evidence for the model. He will close by describing the model's application by health agencies including WHO and CDC.

Creative approaches to increasing COVID-19 Vaccination uptake

Gale Burstein

Dr Burstein will talk about the early challenges of COVID vaccination when vaccine demand exceeded the vaccine supply in Erie County and Buffalo, New York. She will then discuss how the situation transitioned into one where vaccine supply exceeds vaccine demand. Finally, she will discuss creative approaches and incentives to motivate people to get vaccinated.



Theme 3: Financial incentives as commitment devices

Commitment lotteries for gym attendance and smoking cessation at the workplace

Koen van der Swaluw

Nudging and rewards for behavior change & losing weight with a precommitment

Jeroen Kemperman

Jeroen will discuss his insights about using rewards and nudging in behavior change programs at health insurance company Zilveren Kruis Achmea. More specifically, he will discuss the innovative program 'Losing weight with appointments'. In this program participants enter into a tripartite agreement. This means that the health insurance company will pay the bill of the program if the participant achieves the weight loss goal, the participant pays the bill if the goal has not been achieved because he / she has not faithfully participated and the gym will not send a bill if the goal has not been achieved while the participant has participated faithfully enough. The setup and results of this program are sensational and have been refined with Dan Ariely from Duke University.

Theme 4: Deposit contract financial incentives

Theoretical and practical advantages of deposit contracts & results of several field experiments

David de Buissonjé

David will discuss the problem of behaviour change and the solution that Odysseus used. He will then discuss the theoretical and practical advantages of using participants' own money as an incentive in a deposit contract. Finally, he will present the results of two field experiments where deposit contracts were used to increase physical activity using a smartphone application.

Lessons learned from developing and implementing StepBet

Jamie Rosen

Jamie Rosen is the CEO and founder of WayBetter. He will discuss the challenges he and his team faced in developing their games for a healthy lifestyle. More specifically, he will discuss how they built a successful product and business around increasing step counts using a social and gamified deposit contract in their product StepBet.