

Less carrot more stick: promoting health behavior change with deposit contracts

Buisonjé, D.R. de

Citation

Buisonjé, D. R. de. (2024, February 29). *Less carrot more stick: promoting health behavior change with deposit contracts*. Retrieved from https://hdl.handle.net/1887/3719737

Version:	Publisher's Version
License:	Licence agreement concerning inclusion of doctoral thesis in the Institutional Repository of the University of Leiden
Downloaded from:	https://hdl.handle.net/1887/3719737

Note: To cite this publication please use the final published version (if applicable).

Publications

Buisonje D.R. de, Ritter S.M., Bruin S. de, Horst J.M.L. ter & Meeldijk A. (2017), Facilitating creative idea selection: the combined effects of self-affirmation, promotion focus and positive affect, *Creativity Research Journal* 29(2): 174-181.

Bouwman, E. P., Onwezen, M. C., Taufik, D., **de Buisonjé, D.,** & Ronteltap, A. (2020). Brief self-efficacy interventions to increase healthy dietary behaviours: evidence from two randomized controlled trials. *British Food Journal*, *122*(11), 3297-3311.

Cohen Rodrigues, T. R., De Buisonjé, D. R., Keesman, M., Reijnders, T., Van Der Geer, J. E., Janssen, V. R., Kraaijenhagen, R. A., Atsma, D. E., & Evers, A. W. (2021). Facilitators of and barriers to lifestyle support and eHealth solutions: interview study among health care professionals working in cardiac care. Journal of Medical Internet Research, 23(10), e25646.

de Buisonjé, D., Van der Geer, J., Keesman, M., Van der Vaart, R., Reijnders, T., Wentzel, J., Kemps, H., Kraaijenhagen, R., Janssen, V. and Evers, A. (2021). Financial Incentives for Healthy Living for Patients With Cardiac Disease From the Perspective of Health Care Professionals: Interview Study. *JMIR cardio*, *5*(2), e27867.

Bente, B. E., Wentzel, J., Groeneveld, R. G., IJzerman, R. V., **de Buisonjé, D. R.,** Breeman, L. D., Janssen, V. R., Kraaijenhagen, R., Pieterse, M. E., Evers, A. W., & van Gemert-Pijnen, J. E. (2021). Values of importance to patients with cardiovascular disease as a foundation for eHealth design and evaluation: Mixed methods study. *JMIR Cardio*, *5*(2), e33252.

Skvortsova, A., Cohen Rodrigues, T., **de Buisonjé, D.,** Kowatsch, T., Santhanam, P., Veldhuijzen, D. S., van Middendorp, H., & Evers, A. (2022). Increasing the effectiveness of a physical activity smartphone intervention with positive suggestions: randomized controlled trial. *Journal of Medical Internet Research*, *24*(3), e32130.

Buisonjé D.R. de, Reijnders T.R., Cohen Rodrigues T.R., Prabhakaran S., Kowatsch T., Lipman S.A., Bijmolt T.H.A., Breeman L.D., Janssen V.R., Kraaijenhagen R.A., Kemps H.M.C. & Evers A.W.M. (2022). Investigating rewards and deposit contract financial incentives for physical activity behavior change using a smartphone app: randomized controlled trial, *Journal of Medical Internet Research* 24(10): e38339.

Cohen Rodrigues, T. R., Reijnders, T., **De Buisonjé, D. R.,** Breeman, L. D., Van den Broek, I., Janssen, V. R., Kraaijenhagen, R. A., Atsma, D. E., & Evers, A. W. (2022). Lifestyle support

preferences of patients with cardiovascular diseases: What lifestyle support might work best for whom? *PEC Innovation*, *1*, 100071.

de Buisonjé, D. R., Brosig, F., Breeman, L. D., Bloom, E. L., Reijnders, T., Janssen, V. R., Kraaijenhagen, R. A., Kemps, H. M., & Evers, A. W. (2023). Put your money where your feet are: The real-world effects of StepBet gamified deposit contracts for physical activity. *Internet Interventions*, *31*, 100610.

de Buisonjé, D. R., Brosig, F., Breeman, L. D., Bloom, E. L., Reijnders, T., Janssen, V. R., Kraaijenhagen, R. A., Kemps, H. M., & Evers, A. W. (2023). Corrigendum to 'Put your money where your feet are: The real-world effects of StepBet gamified deposit contracts for physical activity' [Internet Interv., volume 31, March 2023, 100610]. *Internet Interventions*, *32*, 100626.

de Buisonjé, D., Reijnders, T., Cohen Rodrigues, T., Van den Broek, I., Kraaijenhagen, R., Janssen, V., Kemps, H., & Evers, A. (2023). Cardiovascular disease patients' views on using financial incentives for health behavior change: Are deposit contracts acceptable? *Clinical eHealth*, *6*, 60-75.

de Buisonjé, D. R., Reijnders, T., Cohen Rodrigues, T. R., Santhanam, P., Kowatsch, T., Breeman, L. D., Janssen, V. R., Kraaijenhagen, R. A., Kemps, H. M., & Evers, A. W. (2024). Less stick more carrot? Increasing the uptake of deposit contract financial incentives for physical activity: A randomized controlled trial. *Psychology of Sport and Exercise*, *70*, 102532.

Curriculum Vitae

David de Buisonjé was born on 18 June 1988 in Amsterdam, the Netherlands. He started his studies at Etty Hillesum Lyceum Deventer where he received his HAVO diploma in 2005. In 2009 he obtained a Bachelor in architecture from Saxion University of applied sciences in Enschede. After realizing that it was people (rather than bricks) which sparked his curiosity, he decided to pursue a degree in Psychology at Radboud University Nijmegen. There he received a Bachelor (cum laude) with a specialization in social psychology, and a Master (bene meritum) with a specialization in health behavior change in 2014.

In 2015, David started working as a behavior analyst for the digital health startup Selfcare. In this role, David collaborated with the company founders, software programmers and designers to develop and implement a digital health behavior change platform. In 2017, David started his PhD project at Leiden University. During his PhD project, David initiated a collaboration with the Centre for Digital Health Interventions at ETH Zürich in Switzerland to develop a smartphone application that was used for two field experiments included in this dissertation. Furthermore, David initiated a collaboration with the company Waybetter Inc. in the United States to perform research on their data. During his PhD, David was elected to represent the PhD candidates for a oneyear term as spokesperson in the daily board of the department of Health, Medical and Neuropsychology at Leiden University.

In 2021, while wrapping up his PhD dissertation, David started as project lead of the innovation project 'Healthy Society Map'. His role is to coordinate a multidisciplinary team of researchers, policy makers, public health advisors and designers from the province Zuid-Holland, the Municipal Health Services (GGD) and Leiden-Delft-Erasmus universities, with the aim to improve public health research and policy. He currently combines this role with a postdoctoral position at the department of Human Centered Design at TUDelft where he continues his research on (financial) incentives for health behavior change.

David remains committed to study and develop digital tools that support health behavior change, preferably on the intersection between product development, scientific research and policy making.

Acknowledgements

Completing this dissertation was only possible with the help and support of the many great people around me. Here, I want to acknowledge their contributions and thank some of them.

Dear Andrea, this whole journey started in your office where I had my job interview for the BENEFIT project. Since then, our ways have not parted until this day. Your mentorship has challenged me to improve day by day, and I am grateful for all the small and big learnings during the six years that we worked together. I will never forget your advice to visit the island of Madeira when my stress levels peaked somewhere in the middle of this journey. You have shown me how to make impact with research, but also how to stay balanced during difficult periods. I am very grateful for your guidance, and look forward to continuing our collaboration in the future. Dear Hareld, you were a great copromotor. I appreciate how available you were, and how quickly you always provided me with feedback. Thank you for your commitment to my process. I hope that you enjoyed our collaboration as much as I did. Oh, and I owe you a bottle of Glen Fiddich for not completing that meta-analysis. Dear Thomas, although we did not always agree on every detail, I am grateful for your help in designing several of the studies in this dissertation.

Dear Veronica, you have been a trusted advisor. Your warm personality and listening ear were very welcome at times. I want to thank you for being available when times were rough. Your advice helped me to overcome several roadblocks. Dear Linda, your advice on my statistical analyses and writing was invaluable. I enjoyed collaborating with you on almost all the chapters of this dissertation. Your critical comments have drastically improved the quality of this dissertation. Dear Mike, you helped launch the BENEFIT project in its initial stages, and you also helped me to get started on my journey. Your warm, but also highly critical attitude was very stimulating and triggered me to become a better researcher. I am grateful for the friendship that followed after you took on new challenges.

Dear Jamie, I owe the coolest chapter of this dissertation to you. Around six months after reaching out to you on LinkedIn, you invited me for dinner in Amsterdam and we have been collaborating since. You trusted me with the data of your company and provided me with exciting learning opportunities. I wish more CEOs would have the curious and open mindset towards science that you have! Dear Roderik, you have been an inspiring project leader and helped to launch the project on a good trajectory. I enjoyed our early days of drafting customer journeys and thinking about how the e-health portal could be developed further. Thank you for the enjoyable collaboration! Dear Erika, Tobias and

Prabhu. Thank you for your technical, methodical, and organizational support in making the research in this dissertation possible. Fiona, it was an honor to supervise you during your research Master. I am proud of the research we did together. Tom and Jeroen, thank you for hiring me, training me, and inspiring me in my first job in digital health at Selfcare. The trust you put in me during the early stages of my career layed the foundation for my later endeavors. Katja and Judith, you introduced Jessica and me to the formal and informal procedures of the department in Leiden. Thank you for the smooth start! Dear writing club (Merve, LingLing, Talia, Fabian, Nathal, Laura), during the COVID lockdown we wrote together and supported each other. Large parts of this dissertation were written thanks to the commitment and support you helped provide.

Talia, we went through this dissertation journey on a tandem. Thank you for being a great buddy (and paranymph). Dear Chènevievre. I am eternally grateful for all your help with designing this book. Mandy, thank you for helping me with Vlookup, although that was probably the least of your contributions. Nora, you endured me working on this dissertation during our holidays together. Thank you for supporting me and giving me the space that I needed. Vincent, Paul and Luuk. Thank you for the friendship during all these years. You were always there with sharp questions, a listening ear or simply a beer. I consider myself lucky to have friends like you. Rosa, thank you for being my sister, and for enduring my stress levels during our family gatherings. Fridtjof, you never pushed me to achieve anything. By giving me the freedom to follow my own path you helped cultivate my intrinsic motivation, and that is what made me persist. Vera, thank you for always watching over my shoulder from afar. I imagine us celebrating together.

David