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

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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 Buissonjé was born on 18 June 1988 in Amsterdam, the Netherlands. He started his studies at Eddy 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 one-year 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.

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David