

## Sandra Matz

### Curriculum Vitae

Columbia Business School  
716 Uris Hall

Email: sm4409@gsb.columbia.edu  
www.sandramatz.com

#### Research Interests

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My work explores the relationships between latent psychological dimensions (e.g. personality) and large-scale records of human behavior found in the digital environment (e.g. Facebook Likes, credit card transaction). More specifically, my research focuses on the following three questions: What can Big Data tell us about the socio-psychological characteristics of individuals? What can Big Data tell us about the real-life consequences of psychological drivers? How can Big Data help individuals and businesses make better decisions?

#### Appointments

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Since 07/2020      **Associate Professor of Management**  
Columbia Business School

Since 07/2017      **Assistant Professor of Management**  
Columbia Business School

04/2018-05/2018      **Visiting Professor of Marketing**  
University College Dublin

#### Education

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06/2017      **Ph.D. in Psychology**  
University of Cambridge (UK)

- Thesis: Psychological Fit in Consumption - A Big Data Approach
- Supervisor: Professor John Rust

09/2016 – 12/2016      **Visiting Researcher**  
University of Texas at Austin, Department of Psychology

- Sponsor: Professor Sam Gosling

04/2016 - 06/2016      **Visiting Researcher**  
Stanford Graduate School of Business (Management Group)

- Sponsor: Professor Michal Kosinski

10/2009 - 08/2013      **B.Sc. in Psychology (Distinction)**  
Albert-Ludwigs-University Freiburg (Germany)

- Thesis: Tell me what you like and I tell you who you are: Development and preliminary validation of the preference-based personality questionnaire (PPQ)

10//2011 - 07/2012      **One-year-visiting student in Politics, Psychology and Sociology**  
University of Cambridge (UK)

## Publications

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### Refereed journal articles

- Bailey\*+, E., **Matz, S. C.\***, Youyou, W. & Iyengar, S. (in press). Authentic Self-Expression on Social Media is Associated with Greater Subjective Well-Being. *Nature Communications*.
- Ruggeri, K., Garcia-Garzon, E., Maguire, A., **Matz, S. C.**, Huppert, F. (in press). Well-being in Europe: A comprehensive measure to explore populations and profiles. *Health and Quality of Life Outcomes*.
- Wertenbrock, K., [...], Matz, S. C., [...] & Zweber, Y. (2020). Autonomy in consumer choice. *Marketing Letters*.
- Goetz, F+, Ebert, T., Mueller, S. R., Gladstone, J. J. & **Matz, S. C.** (2020). Spending reflects not only who we are but also who we are around: The joint effects of individual-level and geographic personality on consumption. *Journal of Personality and Social Psychology*
- Matz, S. C.**, & Harari, G. (2020). Person-environment transactions: Mapping the relationships between Big Five personality traits, states, and daily places. *Journal of Personality and Social Psychology*
- Greenberg, D. M.\*+, **Matz, S. C.\***, Schwartz, A. & Frick, K. R. (2020). The self-congruity effect of music. *Journal of Personality and Social Psychology*.
- Mueller+, S., Peters, H., **Matz, S. C.**, Wang, W. & Harari, G. (2020). Everyday Mobility Behaviors Predict Psychological WellBeing Among Young Adults. *European Journal of Personality*.
- Hall, A+. & **Matz, S. C.** (2020). Targeting Item-Level Nuances Leads to Small but Robust Improvements in Personality Prediction from Digital Footprints. *European Journal of Personality*.
- Cerf, M, **Matz, S. C.** & Berg, A. (2020). Using Blockchain to Improve Decision Making that Benefits the Public Good. *Frontiers in Blockchain*.
- Cowgill, B., Dell'Acqua, F. & **Matz, S. C.** (2020). Algorithmic Fairness Rethoric. *American Economic Association Papers and Proceedings*
- Matz, S. C.**, Appel, R., & Kosinski, M. (2019). Privacy in the Age of Psychological Targeting. *Current Opinion in Psychology*.
- Matz, S. C.**, Menges, J. I., Stillwell, D. J. & Schwartz, H. A. (2019). Income is predictable from Facebook profiles. *PLoS ONE*.
- Matz, S. C.**, Segalin, C., Stillwell, D., Müller, S. R. & Bos, M. (2019). Using computational methods to predict personal image appeal. *Journal of Consumer Psychology*
- Gladstone, J. J.\*+, & **Matz, S. C.\***, Lemaire, A. (2019). Can Psychological Traits be Inferred from Spending: Evidence from Transaction Data. *Psychological Science*, 30(7):1087-1096.
- Matz, S. C.**, & Gladstone, J.J. (2018). Nice Guys Finish Last: Why and when agreeableness is related to economic hardship. *Journal of Personality and Social Psychology*.
- Kulkarni+, V., Kern M. L., Stillwell, D., Kosinski, M., **Matz, S. C.**, Ungar, L., Skiena, S. & Schwartz, A. (2018). Latent Human Traits in the Language of Social Media: An Open-Vocabulary Approach. *PLoS ONE*.
- Matz, S. C.**, Kosinski, M., Nave, G., & Stillwell, D. (2018). Reply to Sharp et al.: Psychological targeting produces robust effects. *Proceedings of the National Academy of Science*.

\*shared first authors +supervised lead graduate/postdoctoral students

- Matz, S. C.**, Kosinski, M., Nave, G., & Stillwell, D. (2018). Reply to Eckles et al.: Facebook's optimization algorithms are highly unlikely to explain the effects of psychological targeting. *Proceedings of the National Academy of Science*.
- Matz, S. C.**, Kosinski, M., Nave, G., & Stillwell, D. (2017). Psychological Targeting as an Effective Approach to Digital Mass Communication. *Proceedings of the National Academy of Science*.
- Matz, S. C.**, & Netzer, O. (2017). Using Big Data as a Window Into Consumer Psychology. *Current Opinion in Behavioral Science*, 18, 7-12.
- Matz, S. C.**, Gladstone, J. J., & Stilwell, D. (2017). In the World of Big Data, Small Effects Can Still Matter: Reply to Boyce et al. *Psychological Science*, 28(4):547-550.
- Behrendt, P., **Matz, S. C.** & Goeritz, A. (2017). An integrative model of leadership behaviour. *Leadership Quarterly*, 28(1), 229-244.
- Müller<sup>+</sup>, S. R, Harari, G. M., Mehrotra, A., **Matz, S. C.**, Khambatta, P., Musolesi, M., Mascolo, C., Gosling, S. D., & Rentfrow, P. J. (2017). Using human raters to characterize the psychological characteristics of GPS-based places. *Proceedings of the 2017 ACM International Joint Conference on Pervasive and Ubiquitous Computing*, 157-160
- Matz, S. C.**, Gladstone, J. J. & Stillwell, D. (2016). Money Buys Happiness if Spending Fits our Personality. *Psychological Science*, 27(5), 715-725.
- Kosinski, M., **Matz, S. C.**, Gosling, S., Popov, V. & Stillwell, D (2015). Facebook as a Social Science Research Tool: Opportunities, Challenges, Ethical Considerations and Practical Guidelines. *American Psychologist*, 70(6), 543-56.

### **Manuscripts under review**

- Ebert, T., Goetz, F., Berkessel, J. B., Wuttke, A., Jonsson T., & **Matz, S. C.** Populism thrives where people lead less successful lives: Predicting Trump votes from large-scale biographical data.
- Peters, H., Goetz, F. M., Ebert, T., Mueller, S. R. , Rentfrow, P. J., Gosling, S. D., Obschonka, M., Potter, J. & **Matz, S. C.** Regional personality predicts the spread of COVID-19 and social distancing behavior.
- Matz, S. C.**, Hyon, R., Baeck, E., Cerf, M. & Parkinson, C. Personality similarity predicts neural synchrony in fMRI and EEG data.
- Jachimowicz, J. M., Frey, E. L., **Matz, S. C.**, Jeronimus, B. F., Galinsky, A. D. More Money, less Intense Problems: Financial Scarcity is Linked to Higher Distress Variability and Reduced Well-being
- Jun, Y., Wilcox, K., & **Matz, S. C.**. Second-Order Beliefs Lower the Performance of Attractive People on Intelligence Tests.
- Gladstone, J., **Matz, S. C.** & Garbinsky, E. Price Moderates the Effect of Self-Brand Congruity on Brand Preferences.

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### Book chapters

- Appel, R. & **Matz, S. C.** (in press). Psychological Targeting in the Age of Big Data
- Matz, S. C.**, Rolnik, G., & Cerf, M. (2018). Solutions to the threats of digital monopolies. In Stigler Center ebook Digital Platforms and Concentration.
- Plohl, N., Stuhldreier, J., Ruggeri, K., & **Matz, S. C.** (2018). Chapter 10: Communications. In Ruggeri, K. (Ed.). Behavioral Insights for Evidence-Based Policy. Routledge.
- Matz, S. C.** & Hirsh, J. (2017). Marketing and Personality. In Carducci, B. J. (eds), *The Wiley Encyclopedia of Personality and Individual Differences*. John Wiley & Sons, Inc.
- Matz, S. C.** (2016). *Personality-customised advertising in the digital environment*. In C. Jansson-Boyd & M. Zawisza (eds), *International Handbook of Consumer Psychology*. Taylor & Francis.
- Matz, S. C.**, Chan, Y. & Kosinski, M. (2016). Models of Personality. In Tkalcic, Decarolis, Kosir & Odić (eds), *Emotions and Personality in Personalized Systems*. Springer
- Behrendt, P. & **Matz, S. C.** (2014). Wie Sie Probleme lösen anstatt sie zu fokussieren. In A. Ryba, D. Pauw, D. Ginati & S. Rietmann (Hrsg.), *Professionnell coachen. Das Methodenbuch*: Beltz.

### Popular Press (Selected)

- Matz, S. C.**, Appel, R. & Kosinski, M. (2019). Rethinking Privacy in the Age of Psychological Targeting. *London School of Economics Blog*
- Matz, S. C.** (2018). *Psychological microtargeting could actually save politics*. Wired.
- Cerf, M., **Matz, S. C.** & Rolnik, G. (2018). There's still time to stop the tech monopoly takeover. Fortune.
- Graves, C. & **Matz, S. C.** (2018). *What marketers should now about personality-based marketing*. Harvard Business Review.
- Jachimowicz, J. **Matz, S. C.** & Polonski, V. (2017). *The Behavioral Scientist's Ethics Checklist*. The Behavioral Scientist.

### Conference Publications

- Matz, S. C.** (2019). Nice guys finish last: When and why agreeableness is associated with financial hardship. SPSP preconference, Portland.
- Matz, S. C.** (2019). Psychological framing as an affective approach to large-scale persuasive communication. SPSP, Portland.
- Matz, S. C.**, Stillwell, D., Nave, G. & Kosinski, M. (2018). *Psychological Targeting in Digital Mass Persuasion*. BDRM preconference. Boston, MA.
- Matz, S. C.**, Stillwell, D., Nave, G. & Kosinski, M. (2018). *Psychological Targeting in Digital Mass Persuasion*. 30th Annual APS Convention. San Francisco, CA.
- Matz, S. C.**, Stillwell, D., Nave, G. & Kosinski, M. (2018). *Psychological Targeting in Digital Mass Persuasion*. AOM Big Data. Guildford, UK.
- Matz, S. C.**, Stillwell, D., Nave, G. & Kosinski, M. (2017). *Psychological Framing in Real-Life Digital Mass Persuasion*. ACR. San Antonio, CA.

- Matz, S. C.**, Harari, G.M., Müller, S.R., Gosling, S.D. (2017). *Using experience sampling methods to study person-environment fit*. Meeting of the Society for Ambulatory Assessment, Luxembourg.
- Matz, S. C.**, Stillwell, D., Nave, G. & Kosinski, M. (2017). *Psychographic Persuasion as an Effective Approach to Digital Mass Communication*. ARP. Sacramento, CA.
- Matz, S. C.** (2017). *The benefits of personality-tailored communication*. 2nd International Convention of Psychological Science, Vienna.
- Matz, S. C.**, & Gladstone, J. (2017). *Nice Guys Finish Last: Agreeableness is Linked to Negative Financial Outcomes in Low-Income Individuals*. 18th Annual Meeting of the Society for Personality and Social Psychology, San Antonio.
- Matz, S. C.**, Gladstone, J., & Stillwell, D. (2016). *Money Buys Happiness if Spending Fits our Personality*. 18th European Conference on Personality, Timisoara (Romania).
- Matz, S. C.**, Segalin, C., Stillwell, D., & Bos, M. (2016). Using algorithms to increase the personal appeal of commercial images. 28th Annual APS Convention, Chicago.
- Matz, S. C.**, Gladstone, J., & Stillwell, D. (2016). *Money Buys Happiness if Spending Fits our Personality*. 17th Annual Meeting of the Society for Personality and Social Psychology, San Diego.
- Matz, S. C.**, Popov, V., Stillwell, D., & Kosinski, M. (2015). *Using the Big Five for personality-customised advertising on Facebook*. 16th Annual Meeting of the Society for Personality and Social Psychology, Long Beach.
- Matz, S. C.**, Chan, Y. E. F., Popov, V., Stillwell, D., & Kosinski, M. (2014). *Using Big Data in real-life online marketing: personality-targeted and tailored advertisements on Facebook*. 26th Annual APS Convention, San Francisco.

### Invited Talks and Keynotes

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- Matz, S. C. (2019). The future of psychological profiling. Fast Forward Forum. Venice
- Matz, S. C. (2019). What your digital footprints can reveal about you. TEDx Chicago (60k+ views)
- Matz, S. C. (2018). Using Big Data as a window into consumers' psychology. The psychology of Technology. Stanford, CA.
- Matz, S. C. (2018). Using Big Data to study individual differences and decision making in the wild. Kellogg Management & Organizations Seminar Series. Chicago, IL.
- Matz, S. C. (2018). The Future of the Digital Economy. Zurich Risk Summit, Berlin.
- Matz, S. C. (2018). The Science Behind Cambridge Analytica. USI, Paris.
- Matz, S. C. (2018). What we can learn about psychology from Big Data. University College Dublin, Blackrock.
- Matz, S. C. (2017). The era of digital psychometrics. Berlin School of Creative Leadership, New York.
- Matz, S. C. (2017). *Digital Happiness*. Invite Keynote at the Annual Sogeti Summit, Chicago.
- Matz, S. C. (2017). *Big Data, Psychological Profiling and the Future of Digital Marketing*. Invited Keynote at the ADC Digital Experience, Düsseldorf.

\*shared first authors +supervised lead graduate/postdoctoral students

- Matz, S. C. (2017). *Psychographic Persuasion*. Invited Talk at the European Commission Joint Research Center, Ispra.
- Matz, S. C. (2017). *Digital Psychometrics*. Invited Talk at the Fraunhofer-Institut for Technik und Wirtschaftsinformatik, Kaiserslautern.
- Matz, S. C. (2017). *Digital Psychometrics and its Effects on Technology*. Invited Keynote at Apache: Big Data North America 2017, Miami.
- Matz, S. C. (2017) *Big Data, Psychological Profiling and the Future of Digital Marketing*. Trivago Academy, Düsseldorf.
- Matz, S. C. (2017). The Promises and Perils of Psychographic Targeting: A Look into the Future. Microsoft EXPLAIN, Berlin
- Matz, S. C. (2017). Big Data, Psychographic Profiling, and the Future of Digital Communication. President Lecture. Berlin School of Creative Leadership, Berlin.
- Matz, S. C. (2016). *Using Big Data and Psychological Theory in Customer-Centric Marketing*. Marketing Seminar, ESADE Business School, Barcelona.
- Matz, S. C. (2016). *Using Big Data and Psychological Theory in Customer-Centric Marketing*. Marketing Seminar, London Business School, London.
- Matz, S. C. (2016). *Using Big Data and Psychological Theory in Customer-Centric Marketing*. Marketing Seminar, Columbia Business School, New York.
- Matz, S. C. (2016). *Psychology gone wild: A Big Data approach to psychological research*. Social and Personality Psychology Seminar, University of Texas, Austin.
- Matz, S. C. (2015). *Big Data Assessment: Predicting Psychological Traits from Digital Footprints*. Keynote at the VII Brazilian Congress for Psychological Assessment, Sao Paulo.
- Matz, S. C. (2015). *Using Big Data in personality-customised advertising*. Keynote at the DataIQ Summit, London.
- Matz, S. C. (2014). *Using preference-based predictions of personality for customised advertising on Facebook*. Invited talk at the WWBP, University of Pennsylvania.

## Conferences organized

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SPSP Summer Forum on Big Data in St. Louis, 2019.

## Selected Media Coverage

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- Selected media coverage on “Nice Guys Finish Last” in Forbes ([here](#)), Psychology Today ([here](#)), Inc. ([here](#)), BBC ([here](#)), Scientific American ([here](#)), Newsweek ([here](#)).
- Wired Op-ed on the potential benefits of psychological micro-targeting ([here](#)).
- Talk show im SRF (Swiss TV) on the topic of "Digital Manipulation: Do Facebook and Co. pose a threat to our democracy?" ([here](#)).
- Selected media coverage on “Psychological Targeting as an Effective Approach to Digital Mass Persuasion” in the Guardian ([here](#)), Business Insider ([here](#)), Inc. ([here](#)), the New York Observer ([here](#)), the Digitalist ([here](#)), Psychology Today ([here](#)), the Restless CMO ([here](#)) ZDF neo (34:40 [here](#)), Motherboard ([here](#), op-ed [here](#)).

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- Selected UK/US media coverage on “Money Buys Happiness When Spending Fits Our Personality” in the Telegraph ([here](#)), the Independent ([here](#)), Washington Post ([here](#)), Chicago Tribune ([here](#)), CNBC ([here](#)), the World Economic Forum ([here](#)).
- Interview with Psychology Today on “Creating Ads We’d be Glad to See” [here](#).
- Interview in ‘DIE WELT’ on the topic of “Recruitment via Facebook” [here](#).
- German TV coverage on the predictive power of Facebook Likes ([here](#) and [here](#)).

## Awards and Honours

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|-------------------|---|
| 10/2019           | <b>Capital 40 under 40</b>  |
| 08/2019           | <b>World Frontiers Forum Young Pioneer</b><br>Harvard and MIT Initiative to unite leaders in industry, culture, and government, and science                                     |
| 04/2016           | <b>Top 30 Thinkers under 30</b><br>Pacific Standard Magazine<br>Recognizes young men and women predicted to have a serious impact on the social, political, and economic issues |
| 02/2010 – present | <b>Full Undergraduate and Graduate scholarship</b><br>German National Academic Foundation<br>Total amount: \$115,000  |
| 02/2016           | <b>DatalQ Big Data 100 of 2016</b><br>Recognizes the 100 most influential data marketers in the UK  |
| 09/2016           | <b>Kurt Hahn Scholarship</b><br>Total amount: £ 3,000 (~ \$4,500)   |
| 07/2015           | <b>Accenture Innovation Award</b> (with Prof. Michal Kosinski)<br>Total amount: \$25,000  |
| 02/2015           | <b>DatalQ Big Data 100 of 2015</b><br>Recognizes the 100 most influential data marketers in the UK  |
| 07/2014           | <b>DatalQ New Talent Award for Data Marketers under 30</b><br>Recognizes a young talent in data-driven marketing  |

## Research and Professional Experience

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|-------------------|--|
| Since 07/2017     | <b>Academic Advisor at Hatch</b>   |
| 04/2014 – 07/2016 | <b>External Consultant</b><br>Grayling, Edelman and VisualDNA (projects worth \$200,000) |
| 09/2015 – 12/2015 | <b>Research Associate</b><br>Disney Research Pittsburgh                                  |
| 01/2014 – 04/2014 | <b>Junior Psychometrician</b><br>University of Cambridge Psychometrics Centre            |

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- 10/2012 – 06/2013 **Research and Project Assistant**  
Department of Work Psychology, University of Freiburg
- 02/2011 – 04/2011 **Human Resource Internship**  
Novartis AG (Switzerland)
- 04/2010 – 06/2011 **Research Assistant**  
Department of Social Psychology & Methodology, University of Freiburg

## Teaching experience

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- MBA classes **Managerial Negotiations**
- Lectures and Workshops **Theme Leader of the “Big Data” topic**  
Junior Researcher Programme, University of Cambridge  
Insights for Impact report [here](#).
- Guest lecturer in Personality**  
Sutton Trust Summer School, University of Cambridge
- Guest lecturer in Consumer Psychology**  
London Metropolitan University
- Instructor of several R and Concerto courses**  
University of Cambridge Psychometrics Centre
- Instructor of Level A/B courses in occupational test use**  
University of Cambridge Psychometrics Centre
- Supervision **Supervision of undergraduate dissertation projects**  
Department of Psychology, University of Cambridge
- TA work **MBA class on “Big Data in Business”**  
Judge Business School, University of Cambridge
- Replication course**  
Social Sciences Research Methods Center, University of Cambridge
- Social Psychology lecture**  
Department of Social Psychology & Methodology, University of Freiburg

## Outside Activities

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Columbia Business School requires faculty members to disclose any activities that might present a real or apparent conflict of interest.

Academic Advisor: Hatch, MePrism, Pinpoint, Ready Education

\*shared first authors +supervised lead graduate/postdoctoral students



## Skills

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|----------------------|---|
| <b>Languages</b>     | German (native speaker), English (fluent), French (basic), Italian (basic), Spanish (basic)   |
| <b>Programming</b>   | R (fluent), Python (basics), HTML (basics), MySQL (basics)  |
| <b>Survey Design</b> | Concerto (adaptive testing platform, advanced), Qualtrics (advanced)  |
| <b>Data Analysis</b> | <ul style="list-style-type: none"><li>▪ Basic inferential statistics (regression, ANOVA etc.)</li><li>▪ Advanced statistical modelling methods (SEM, factor analysis, IRT, multilevel modelling)</li><li>▪ Applied machine learning techniques (SVM, OLS, LASSO, NLP)</li></ul> |

## Professional Associations

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|-----------------|---|
| Ad-hoc Reviewer | Management Science<br>Nature Human Behavior<br>Journal of Personality Research<br>Psychological Science<br>Journal of Personality and Social Psychology<br>European Journal of Personality<br>Personality and Individual Differences<br>Current Opinion in the Behavioral Sciences<br>Cyberpsychology, Behavior and Social Networking<br>PLoS ONE<br>Social Science Computer Review<br>Journal of Environmental Psychology<br>Journal of Consumer Psychology<br>Marketing Science |
| Affiliations    | Academy of Management (AOM)<br>Association for Psychological Science (APS)<br>Society for Personality and Social Psychology (SPSP)<br>Association for Consumer Research (ACR)   |