Sandra Matz

Curriculum Vitae

Columbia Business School 312 Kravis Hall, Manhattanville Campus Email: sm4409@gsb.columbia.edu www.sandramatz.com

Research Interests

My work leverages Big Data analytics to describe, predict and influence how people and organizations think, feel and behave.

Appointments

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	
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)

Refereed journal articles

- Mueller*, S.R., Delahunty, F. & **Matz*, S.C.** (in press). The Impact of the Early Stages of COVID-19 on Mental Health in the United States, Germany, and the United Kingdom. *Journal of Personality and Social Psychology.*
- Matz, S.C., Hyon, R., Baek, E.C., Parkinson, C., & Cerf. M. (2022). Personality similarity predicts synchronous neural responses in fMRI and EEG data. Scientific Reports, 12, 14325.
- Peters, H. Friedrich M. Götz, F. M, Ebert, T, Müller, S. R., Rentfrow, P. J, Gosling, S. D., Obschonka, M., Ames, D., Potter, J. & Matz, S. C. (2022). Regional personality differences predict variation in early COVID-19 infections and regional mobility patterns. *Journal of Personality and Social Psychology.*
- Lawson*, M. A. Martin, A. E., Huda, I. & **Matz, S. C.** (2022). Hiring women into senior leadership positions is associated with a reduction in gender stereotypes in organizational language. *Proceedings of the National Academy of Science*.
- Jachimowicz, J., M., Frey, E. L., **Matz, S. C.**, Jeronimus, B. F., & Galinsky, A. (2022). The Sharp Spikes of Poverty: Financial Scarcity Is Related to Higher Levels of Distress Intensity in Daily Life. *Social Psychological and Personality Science*.
- Ramon*, Y., **Matz, S. C.,** Farrokhnia, R. A. & Martens, D. (2022). Explainable AI for Psychological Profiling from Digital Footprints: A Case Study of Big Five Personality Predictions from Spending Data. *Information*.
- Giorgi, S., Lynn, V., Gupta, K., Ahmed, F., **Matz, S. C.**, Ungar, L., Schwartz, H. A. (2022). Correcting sociodemographic selection bias for population prediction from social media. *ICWSM* '22
- Stachl, C., Boyd, R. L., Horstman, K.T, Khambatta, P. **Matz, S. C.,** & Harari, G. M. (2021). Computational personality assessment. *Personality Science*, 2, 1-22.
- **Matz, S.C.** (2021). Personal Echo Chambers: Openness-to-experience is linked to higher levels of psychological interest diversity in large-scale behavioral data. *Journal of Personality and Social Psychology*.
- Müller*, S. R, Chen*, X, Peters, H, Chaintreau, A. & **Matz, S. C.** (2021). Depression predictions from GPS-based mobility do not generalize well to large, demographically heterogeneous samples. *Scientific Reports*.
- Gladstone, J., Garbinsky, E., & **Matz, S. C.** (2021). When Does Psychological Fit Matter? The Moderating Role of Price on Self-Brand Congruity. *Social Psychology and Personality Science.*
- Tovanich, N., Centellegher, S., Seghouani, N. B., Gladstone, J., **Matz, S. C**, & Lepri, B. (2021). Inferring psychological traits from spending categories and dynamic consumption patterns. *EPJ Data Science*, 10(1), 1-23.
- Bailey*+, E., **Matz, S. C.***, Youyou, W. & Iyengar, S. (2020). 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. (2020). 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. *PLoSONE*.
- **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.,** & Glastone, 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. *PLoSONE*.
- **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.*
- **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⁺, 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.

Books

S. C. Matz (2022). The Psychology of Technology: Social Science Research in the Age of Big Data. APA.

Book chapters

- Lawson, M. A. & Matz., S.C. (2022). Saying more than we know: How Big Data provides a window into the human psyche. In S. C. Matz, The Psychology of Technology. APA.
- **Matz., S.C.**, Appel, R. E., & Croll, B. (2022). Privacy and Ethics in the Age of Big Data. In S. C. Matz, The Psychology of Technology. APA.
- Appel, R. & Matz, S. C. (2021). 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., Stuhlreyer, 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. (2022). Now isn't the time to give users control over their data. Wired
- **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.

^{*}shared first authors, + supervised lead graduate/postdoctoral students

- 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.

Invited Talks and Keynotes (Selection)

- Matz, S. C. (2022). The Human Microscope: How big data offers a window into our psyche. DGPS, Hildesheim Germany.
- Matz, S. C. (2022). The Human Microscope: How big data offers a window into our psyche. Insurance Summit, University of St. Gallen, Switzerland.
- Matz, S. C. (2022). The Human Microscope. Assurex Global Conference. Dallas
- Matz, S. C. (2022). The human microscope: How big data offers a window into our psyche. Opening Ceremony of the Data Science Institute at the University of Amsterdam. Virtual format.
- 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.
- 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 DatalQ 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.

Conference Presentations (Selection)

- Matz, S. C. (2022). Hiring women into senior leadership positions is associated with a reduction in gender stereotypes in organizational language. EAPP, Madrid.
- Matz, S. C. (2022). Regional personality differences predict variation in early COVID-19 infections and regional mobility patterns. Causes and Consequences of Regional Cultural Differences: A Geo-Psychological Perspective, Barcelona
- Matz, S. C., (2022). Personal echo chambers: Openness-to-experience and psychological interest diversity. SPSP, San Franscisco.
- 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.

Conferences organized

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

Selected Media Coverage

- Wired Op-ed on the danger of giving users control over their data without prior regulation (<u>here</u>).
- Documentary "Made to Measure" (here).
- Selected media coverage on "Nice Guys Finish Last" in Forbes (<u>here</u>), Psychology Today (<u>here</u>), Inc. (<u>here</u>), BBC (<u>here</u>), Scientific American (<u>here</u>), Newsweek (<u>here</u>).
- 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).
- Selected UK/US media coverage on "Money Buys Happiness When Spending Fits Our Personality" in the Telegraph (<u>here</u>), the Independent (<u>here</u>), Washington Post (<u>here</u>), Chicago Tribune (<u>here</u>), CNBC (<u>here</u>), the World Economic Forum (<u>here</u>).
- Interview with Psychology Today on "Creating Ads We'd be Glad to See" <u>here</u>.
- Interview in 'DIE WELT' on the topic of "Recruitment via Facebook" <u>here</u>.
- German TV coverage on the predictive power of Facebook Likes (<u>here</u> and <u>here</u>).

Awards and Honours

Time	Award
08/2022	SAGE Early-Career Trajectory Award Society for Personality and Social Psychology Recognizes young scholars in the field of social and personality psychology
08/2022	Dean's Award for Teaching in the Core Columbia Business School Recognizes teaching excellence in the classroom
05/2021	Poets and Quants Top 40 under 40 Business School Professors Recognizes young professors for their teaching and mentorship see Interview <u>here</u>
10/2019	Capital Young Elite 40 under 40 Capital Magazine Recognizes young men and women who contribute science and society
08/2019	Young Pioneer World Frontiers Forum Recognizes young men and women who contribute science and society see Interview here
04/2016	Top 30 Thinkers under 30 Pacific Standard Magazine Recognizes young men and women predicted to have a serious impact on the social, political, and economic issues
02/2010 – 07/2017	Full Undergraduate and Graduate scholarship German National Academic Foundation Total amount: \$115,000
02/2016	2016 Big Data 100 DatalQ Recognizes the 100 most influential data marketers in the UK
09/2016	Kurt Hahn Scholarship Kurt Hahn Trust Total amount: £ 3,000 (~ \$4,500)
07/2015	Accenture Innovation Award (with Dr. Michal Kosinski) Accenture Inc. Total amount: \$25,000
02/2015	2015 Big Data 100 DatalQ Recognizes the 100 most influential data marketers in the UK
07/2014	New Talent Award for Data Marketers under 30 DatalQ Recognizes a young talent in data-driven marketing

Outside Activities

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

Academic Advisor: Hatch, Pinpoint, ONesto, Zala

Professional Associations

Associate Editor Frontiers in Social Psychology

Ad-hoc Reviewer Management Science

Nature Human Behavior

Journal of Personality Research

Psychological Science

Journal of Personality and Social Psychology

European Journal of Personality

Personality and Individual Differences

Current Opinion in the Behavioral Sciences

Cyberpsychology, Behavior and Social Networking

PLoS ONE

Social Science Computer Review Journal of Environmental Psychology Journal of Consumer Psychology

Marketing Science

Affiliations Academy of Management (AOM)

Association for Psychological Science (APS)

Society for Personality and Social Psychology (SPSP)