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Physiological synchrony in the context of cooperation: Theoretical and methodological considerations

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REFERENCES

- Achaibou, A., Pourtois, G., Schwartz, S., & Vuilleumier, P. (2008). Simultaneous recording of EEG and facial muscle reactions during spontaneous emotional mimicry. *Neuropsychologia*, *46*(4), 1104–1113. <https://doi.org/10.1016/j.neuropsychologia.2007.10.019>
- Adolphs, R., Sears, L., & Piven, J. (2001). Abnormal Processing of Social Information from Faces in Autism. *Journal of Cognitive Neuroscience*, *13*(2), 232–240. <https://doi.org/10.1162/089892901564289>
- Adolphs, R., & Tuschke, A. (2017). From Faces to Prosocial Behavior: Cues, Tools, and Mechanisms. *Current Directions in Psychological Science*, *26*(3), 282–287. <https://doi.org/10.1177/0963721417694656>
- Altmann, U. (2011). Investigation of movement synchrony using windowed cross-lagged regression. In *Analysis of verbal and nonverbal communication* (pp. 335–345). Springer, Berlin, Heidelberg. <https://doi.org/10.1007/978-3-642-25775-9>
- Axelrod, R., & Hamilton, W. D. (1981). The evolution of cooperation. *Science*, *211*(4489), 1390–1396. <https://doi.org/10.1126/science.7466396>
- Baer, R. A., Smith, G. T., Hopkins, J., Krietemeyer, J., & Toney, L. (2006). Using Self-Report Assessment Methods to Explore Facets of Mindfulness. *Assessment*, *13*(1), 27–45. <https://doi.org/10.1177/1073191105283504>
- Balliet, D. (2010). Communication and cooperation in social dilemmas: A meta-analytic review. *Journal of Conflict Resolution*, *54*(1), 39–57. <https://doi.org/10.1177/0022002709352443>
- Balliet, D., Li, N. P., Macfarlan, S. J., & Van Vugt, M. (2011). Sex Differences in Cooperation: A Meta-Analytic Review of Social Dilemmas. *Psychological Bulletin*, *137*(6), 881–909. <https://doi.org/10.1037/a0025354>
- Balliet, D., Parks, C., & Joireman, J. (2009). Social value orientation and cooperation in social dilemmas: A meta-analysis. *Group Processes and Intergroup Relations*, *12*(4), 533–547. <https://doi.org/10.1177/1368430209105040>
- Balliet, D., & Van Lange, P. A. M. (2013). Trust, conflict, and cooperation: A meta-analysis. *Psychological Bulletin*, *139*(5), 1090–1112. <https://doi.org/10.1037/a0030939>
- Baron-Cohen, S., Wheelwright, S., Hill, J., Raste, Y., & Plumb, I. (2001). The “Reading the Mind in the Eyes” Test revised version: a study with normal adults, and adults with Asperger syndrome or high-functioning autism. *Journal Child Psychol. Psychiat.*, *42*(2), 241–251. <https://doi.org/https://doi.org/10.1017/S0021963001006643>
- Barrett, L. F., Mesquita, B., & Gendron, M. (2011). Context in emotion perception. *Current Directions in Psychological Science*, *20*(5), 286–290. <https://doi.org/10.1177/0963721411422522>
- Batson, C. D., & Powell, A. A. (2003). Altruism and prosocial behavior. In *Handbook of Psychology* (5th ed., pp. 463–484). John Wiley & Sons, Inc. [https://doi.org/10.1016/0005-7967\(65\)90022-7](https://doi.org/10.1016/0005-7967(65)90022-7)
- Beard, C., Rodriguez, B., Moitra, E., Sibrava, N., Bjornsson, A., Weisberg, R., & Keller, M. (2011). Psychometric Properties of the Liebowitz Social Anxiety Scale (LSAS) in a Longitudinal Study of African Americans with Anxiety Disorders. *Journal of Anxiety Disorders*, *25*(5), 722–726. <https://doi.org/10.1016/j.janxdis.2011.03.009>
- Beatty, J., & Lucero-Wagoner, B. (2000). The pupillary system. In *Handbook of Psychophysiology* (pp. 142–162). Press, Cambridge University.

- Bechara, A., Damasio, H., Tranel, D., & Damasio, A. R. (1997). Deciding advantageously before knowing the advantageous strategy. *Science*, 275(5304), 1293–1295. <https://doi.org/10.1126/science.275.5304.1293>
- Behrens, F., & Kret, M. E. (2019). The Interplay Between Face-To-Face Contact and Feedback on Cooperation During Real-Life Interactions. *Journal of Nonverbal Behavior*, 43(4), 513–528. <https://doi.org/10.1007/s10919-019-00314-1>
- Behrens, F., & Kret, M. E. (2020). Under the umbrella of prosocial behavior – a critical comparison of paradigms. <https://doi.org/https://doi.org/10.31234/osf.io/9uebc>
- Behrens, F., Moulder, R. G., Boker, S. M., & Kret, M. E. (2020). Quantifying physiological synchrony through Windowed Cross-Correlation Analysis: Statistical and theoretical considerations. <https://doi.org/10.1101/2020.08.27.269746>
- Behrens, F., Snijedewint, J. A., Moulder, R. G., Prochazkova, E., Sjak-Shie, E. E., Boker, S. M., & Kret, M. E. (2019). Physiological synchrony promotes cooperative success in real-life interactions. <https://doi.org/http://dx.doi.org/10.1101/792416>
- Benz, M., & Meier, S. (2008). Do people behave in experiments as in the field?—Evidence from donations. *Experimental Economics*, 11(3), 268–281. <https://doi.org/10.1007/s10683-007-9192-y>
- Berntson, G. G., Cacioppo, J. T., & Quigley, K. S. (1991). Autonomic determinism: The modes of autonomic control, the doctrine of autonomic space, and the laws of autonomic constraint. *Psychological Review*, 98(4), 459–487. <https://doi.org/10.1037/0033-295X.98.4.459>
- Bicchieri, C., & Lev-on, A. (2007). Computer-mediated communication and cooperation in social dilemmas: an experimental analysis. *Politics, Philosophy & Economics*, 6(2), 139–168. <https://doi.org/10.1177/1470594X07077267>
- Biel, A., & Thøgersen, J. (2007). Activation of social norms in social dilemmas: A review of the evidence and reflections on the implications for environmental behaviour. *Journal of Economic Psychology*, 28(1), 93–112. <https://doi.org/10.1016/j.joep.2006.03.003>
- Bixenstine, V. E., & Wilson, K. V. (1963). Effects of level of cooperative choice by the other player on choices in a prisoner's dilemma game. Part II. *Journal of Abnormal and Social Psychology*, 67(2), 139–147. <https://doi.org/10.1037/h0044242>
- Blanco, M., Engelmann, D., & Normann, H.-T. (2010). A within-subject analysis of other-regarding preferences. In *DICE Discussion Paper* (Vol. 6). Düsseldorf Institute for Competition Economics (DICE). Retrieved from <http://hdl.handle.net/10419/41419>
- Bó, P. (2005). Cooperation under the Shadow of the Future : Experimental Evidence from Infinitely Repeated Games. *The American Economic Review*, 95(5), 1591–1604.
- Böckler, A., Tusche, A., & Singer, T. (2016). The Structure of Human Prosociality: Differentiating Altruistically Motivated, Norm Motivated, Strategically Motivated, and Self-Reported Prosocial Behavior. *Social Psychological and Personality Science*, 7(6), 530–541. <https://doi.org/10.1177/1948550616639650>
- Bogaert, S., Boone, C., & Declerck, C. (2008). Social value orientation and cooperation in social dilemmas: A review and conceptual model. *British Journal of Social Psychology*, 47(3), 453–480. <https://doi.org/10.1348/014466607X244970>
- Bogart, K. R., & Matsumoto, D. (2010). Facial mimicry is not necessary to recognize emotion: Facial expression recognition by people with Moebius syndrome. *Social Neuroscience*, 5(2), 241–251. <https://doi.org/10.1080/17470910903395692>

- Bohnet, I., & Frey, B. S. (1999). The sound of silence in prisoner's dilemma and dictator games. *Journal of Economic Behavior & Organization*, 38(1), 43–57. [https://doi.org/10.1016/S0167-2681\(98\)00121-8](https://doi.org/10.1016/S0167-2681(98)00121-8)
- Boker, S. M., & Rotondo, J. L. (2002). Symmetry building and symmetry breaking in synchronized movement. *Mirror Neurons and the Evolution of Brain and Language*, 42, 163–171. <https://doi.org/10.1075/aicr.42.14bok>
- Boker, S. M., Xu, M., Rotondo, J. L., & King, K. (2002). Windowed cross-correlation and peak picking for the analysis of variability in the association between behavioral time series. *Psychological Methods*, 7(3), 338–355. <https://doi.org/10.1037/1082-989X.7.3.338>
- Bonnefon, J. F., Hopfensitz, A., & De Neys, W. (2017). Can We Detect Cooperators by Looking at Their Face? *Current Directions in Psychological Science*, 26(3), 276–281. <https://doi.org/10.1177/0963721417693352>
- Boone, C., Declerck, C., & Kiyonari, T. (2010). Inducing cooperative behavior among proselves versus prosocials: The moderating role of incentives and trust. *Journal of Conflict Resolution*, 54, 799–824. <https://doi.org/10.1177/0022002710372329>
- Boone, R. T., & Buck, R. (2003). Emotional expressivity and trustworthiness: The role of nonverbal behavior in the evolution of cooperation. *Journal of Nonverbal Behavior*, 27(3), 163–182. <https://doi.org/10.1023/A:1025341931128>
- Bowles, S., & Gintis, H. (2013). *A cooperative species: Human reciprocity and its evolution*. Princeton University Press. <https://doi.org/10.1515/9781400838837>
- Bradley, M. M., Codispoti, M., Cuthbert, B. N., & Lang, P. J. (2001). Emotion and Motivation I: Defensive and Appetitive Reactions in Picture Processing. *Emotion*, 1(3), 276–298. <https://doi.org/10.1037/1528-3542.1.3.276>
- Bradley, M. M., Miccoli, L., Escrig, M. A., & Lang, P. J. (2008). The pupil as a measure of emotional arousal and autonomic activation. *Psychophysiology*, 45(4), 602–607. <https://doi.org/10.1111/j.1469-8986.2008.00654.x>
- Brosig, J., Weimann, J., & Ockenfels, A. (2003). The effect of Communication Media on Cooperation. *German Economic Review*, 4(2), 217–241. <https://doi.org/10.1111/1468-0475.00080>
- Buck, R., & Van Lear, A. C. (2002). Verbal and nonverbal communication: Distinguishing symbolic, spontaneous, and pseudo-spontaneous nonverbal behavior. *Journal of Communication*, 52(3), 522–541. <https://doi.org/10.1093/joc/52.3.522>
- Cappella, J. (1996). Dynamic coordination of vocal and kinesic behavior in dyadic interaction: Methods, problems, and interpersonal outcomes. In *Dynamic patterns in communication processes* (pp. 353–386). Thousand Oaks, CA, US: Sage.
- Cashdan, E. (1998). Smiles, speech, and body posture: How women and men display sociometric status and power. *Journal of Nonverbal Behavior*, 22(4), 209–228. <https://doi.org/10.1023/A:1022967721884>
- Chanel, G., Kivikangas, J. M., & Ravaja, N. (2012). Physiological compliance for social gaming analysis: Cooperative versus competitive play. *Interacting with Computers*, 24(4), 306–316. <https://doi.org/10.1016/j.intcom.2012.04.012>
- Chartrand, T. L., & Bargh, J. A. (1999). The chameleon effect: The perception-behavior link and social interaction. *Journal of Personality and Social Psychology*, 76(6), 893–910. <https://doi.org/10.1037/0022-3514.76.6.893>

- Cohen, J. (1992). A power primer. *Psychological Bulletin*, *112*(1), 155–159. <https://doi.org/https://doi.org/10.1037/0033-2909.112.1.155>
- Coyne, J. C. (1976). Depression and response of others. *Journal of Abnormal Psychology*, *85*(2), 186–193. <https://doi.org/https://doi.org/10.1037/0021-843X.85.2.186>
- Critchley, H. D., & Harrison, N. A. (2013). Visceral Influences on Brain and Behavior. *Neuron*, *77*(4), 624–638. <https://doi.org/10.1016/j.neuron.2013.02.008>
- Critchley, H. D., Rotshtein, P., Nagai, Y., O'Doherty, J., Mathias, C. J., & Dolan, R. J. (2005). Activity in the human brain predicting differential heart rate responses to emotional facial expressions. *NeuroImage*, *24*(3), 751–762. <https://doi.org/10.1016/j.neuroimage.2004.10.013>
- Crone, E. A., Somsen, R. J. M., Van Beek, B., & Van Der Molen, M. W. (2004). Heart rate and skin conductance analysis of antecedents and consequences of decision making. *Psychophysiology*, *41*(4), 531–540. <https://doi.org/10.1111/j.1469-8986.2004.00197.x>
- Damasio, A. R., Everitt, B. J., & Bishop, D. (1996). The somatic marker hypothesis and the possible functions of the prefrontal cortex. *Philosophical Transactions: Biological Sciences*, *351*(1346), 1413–1420. <https://doi.org/https://doi.org/10.1098/rstb.1996.0125>
- Danyluck, C., & Page-Gould, E. (2019). Social and Physiological Context can Affect the Meaning of Physiological Synchrony. *Scientific Reports*, *9*(1). <https://doi.org/10.1038/s41598-019-44667-5>
- Davis, M. (1980). A multidimensional approach to individual differences in empathy. *JSAS Catalog of Selected Documents in Psychology*, *10*. <https://doi.org/https://doi.org/10.1037/0022-3514.44.1.113>
- Davis, W. E., Giner-Sorolla, R., Lindsay, D. S., Lougheed, J. P., Makel, M. C., Meier, M. E., ... Zelenski, J. M. (2018). Peer-Review Guidelines Promoting Replicability and Transparency in Psychological Science. *Advances in Methods and Practices in Psychological Science*, *1*(4), 556–573. <https://doi.org/10.1177/2515245918806489>
- Dawes, R. M. (1980). Social Dilemmas. *Annual Review of Psychology*, *31*, 169–193. <https://doi.org/10.1146/annurev.ps.31.020180.001125>
- Dawson, M. E., Schell, A. M., & Filion, D. L. (2000). The electrodermal system. In *Handbook of Psychophysiology* (pp. 200–223). Cambridge University Press.
- De Dreu, C. K. W., Nijstad, B. A., & Van Knippenberg, D. (2008). Motivated information processing in group judgment and decision making. *Personality and Social Psychology Review*, *12*(1), 22–49. <https://doi.org/10.1177/1088868307304092>
- de Klerk, C. C. J. M., Hamilton, A. F. d. C., & Southgate, V. (2018). Eye contact modulates facial mimicry in 4-month-old infants: An EMG and fNIRS study. *Cortex*, *106*, 93–103. <https://doi.org/10.1016/j.cortex.2018.05.002>
- De Melo, C. M., Carnevale, P. J., Read, S. J., & Gratch, J. (2014). Reading people's minds from emotion expressions in interdependent decision making. *Journal of Personality and Social Psychology*, *106*(1), 73–88. <https://doi.org/10.1037/a0034251>
- De Waal, F. B. M., & Preston, S. D. (2017). Mammalian empathy: Behavioural manifestations and neural basis. *Nature Reviews Neuroscience*, *18*(8), 498–509. <https://doi.org/10.1038/nrn.2017.72>
- Dijk, C., Koenig, B., Ketelaar, T., & de Jong, P. J. (2011). Saved by the blush: Being trusted despite defecting. *Emotion*, *11*(2), 313–319. <https://doi.org/10.1037/a0022774>

- Doesum, N. J. V., Van Lange, D. A. W., & Van Lange, P. A. M. (2013). Social mindfulness: Skill and will to navigate the social world. *Journal of Personality and Social Psychology, 105*(1), 86–103. <https://doi.org/10.1037/a0032540>
- Drimala, H., Landwehr, N., Hess, U., & Dziobek, I. (2019). From face to face: the contribution of facial mimicry to cognitive and emotional empathy. *Cognition and Emotion, 33*(8), 1672–1686. <https://doi.org/10.1080/02699931.2019.1596068>
- Drolet, A. L., & Morris, M. W. (2000). Rapport in conflict resolution: Accounting for how nonverbal exchange fosters cooperation on mutually beneficial settlements to mixed-motive conflicts. *Journal of Experimental Social Psychology, 36*(1), 26–50. <https://doi.org/https://doi.org/10.1006/jesp.1999.1395>
- Dunbar, R. I. M. (2004). Gossip in evolutionary perspective. *Review of General Psychology, 8*(2), 100–110. <https://doi.org/10.1037/1089-2680.8.2.100>
- Eisenberg, N., & Miller, P. A. (1987). The Relation of Empathy to Prosocial and Related Behaviors. *Psychological Bulletin, 101*(1), 91–119. <https://doi.org/10.1037/0033-2909.101.1.91>
- Ekman, P. (1997). Should we call it expression or communication? *Innovation, 10*, 333–344. <https://doi.org/10.1080/13511610.1997.9968538>
- Ekman, P., & Friesen, W. V. (1971). Constants across cultures in the face and emotion. *Journal of Personality and Social Psychology, 17*(2), 124–129. <https://doi.org/10.1037/h0030377>
- Elfenbein, H. A., & Ambady, N. (2002). On the universality and cultural specificity of emotion recognition: A meta-analysis. *Psychological Bulletin, 128*(2), 203–235. <https://doi.org/10.1037/0033-2909.128.2.203>
- Emonds, G., Declerck, C. H., Boone, C., Vandervliet, E. J. M., & Parizel, P. M. (2011). Comparing the neural basis of decision making in social dilemmas of people with different social value orientations, a fMRI study. *Journal of Neuroscience, Psychology, and Economics, 4*(1), 11–24. <https://doi.org/10.1037/a0020151>
- Epstein, Z., Peysakhovich, A., & Rand, D. G. (2016). The good, the bad, and the unflinchingly selfish: Cooperative decision-making can be predicted with high accuracy when using only three behavioral types. *EC 2016–Proceedings of the 2016 ACM Conference on Economics and Computation, 547–559*. <https://doi.org/10.1145/2940716.2940761>
- Fawcett, C., Arslan, M., Falck-Ytter, T., Roeyers, H., & Gredebäck, G. (2017). Human eyes with dilated pupils induce pupillary contagion in infants. *Scientific Reports, 7*, 1–7. <https://doi.org/10.1038/s41598-017-08223-3>
- Fawcett, C., Wesevich, V., & Gredebäck, G. (2016). Pupillary Contagion in Infancy: Evidence for Spontaneous Transfer of Arousal. *Psychological Science, 27*(7), 997–1003. <https://doi.org/10.1177/0956797616643924>
- Fehr, E., & Fischbacher, U. (2004). Social norms and human cooperation. *Trends in Cognitive Sciences, 8*(4), 185–190. <https://doi.org/10.1016/j.tics.2004.02.007>
- Feldman, R., Magori-Cohen, R., Galili, G., Singer, M., & Louzoun, Y. (2011). Mother and infant coordinate heart rhythms through episodes of interaction synchrony. *Infant Behavior and Development, 34*(4), 569–577. <https://doi.org/10.1016/j.infbeh.2011.06.008>
- Frank, M. G., Ekman, P., & Friesen, W. V. (1993). Behavioral Markers and Recognizability of the Smile of Enjoyment. *Journal of Personality and Social Psychology, 64*(1), 83–93. <https://doi.org/10.1037/0022-3514.64.1.83>
- Frank, R. H. (1988). *Passion within reason: the strategic role of the emotions*. WW Norton & Co.

- Frank, R. H., Gilovich, T., & Regan, D. T. (1993a). Does Studying Economics Inhibit Cooperation? *The Journal of Economic Perspectives*, 7(2), 159–171. <https://doi.org/10.1257/jep.7.2.159>
- Frank, R. H., Gilovich, T., & Regan, D. T. (1993b). The evolution of one-shot cooperation: An experiment. *Ethology and Sociobiology*, 14(4), 247–256. [https://doi.org/10.1016/0162-3095\(93\)90020-I](https://doi.org/10.1016/0162-3095(93)90020-I)
- Franzen, A., & Pointner, S. (2013). The external validity of giving in the dictator game: A field experiment using the misdirected letter technique. *Experimental Economics*, 16(2), 155–169. <https://doi.org/10.1007/s10683-012-9337-5>
- Frohlich, N., & Oppenheimer, J. (1998). Some consequences of e-mail vs. face-to-face communication in experiment. *Journal of Economic Behavior & Organization*, 35, 389–403. [https://doi.org/https://doi.org/10.1016/S0167-2681\(98\)00044-4](https://doi.org/https://doi.org/10.1016/S0167-2681(98)00044-4)
- Galazka, M. A., Åsberg Johnels, J., Zürcher, N. R., Hippolyte, L., Lemonnier, E., Billstedt, E., ... Hadjikhani, N. (2019). Pupillary Contagion in Autism. *Psychological Science*, 30(2), 309–315. <https://doi.org/10.1177/0956797618809382>
- Gates, K. M., & Liu, S. (2016). Methods for Quantifying Patterns of Dynamic Interactions in Dyads. *Assessment*, 23(4), 459–471. <https://doi.org/10.1177/1073191116641508>
- Gibbs, R. W., & Van Orden, G. C. (2003). Are emotional expressions intentional? A self-organizational approach. *Consciousness & Emotion*, 4, 1–16. <https://doi.org/10.1075/ce.4.1.02gib>
- Goldenthal, P., Johnston, R. E., & Kraut, R. E. (1981). Smiling, appeasement, and the silent bared-teeth display. *Ethology and Sociobiology*, 2(3), 127–133. [https://doi.org/10.1016/0162-3095\(81\)90025-X](https://doi.org/10.1016/0162-3095(81)90025-X)
- Green, P., & Macleod, C. J. (2016). SIMR: An R package for power analysis of generalized linear mixed models by simulation. *Methods in Ecology and Evolution*, 7(4), 493–498. <https://doi.org/10.1111/2041-210X.12504>
- Hasson, U., Nir, Y., Levy, I., Fuhrmann, G., & Malach, R. (2004). Intersubject synchronization of cortical activity during natural vision. *Science*, 303, 1634–1640. <https://doi.org/10.1126/science.1089506>
- Hatfield, E., Cacioppo, J., & Rapson, R. (1993). Emotional contagion. *Current Directions in Psychological Science*, 2(3), 96–99. <https://doi.org/10.1111/1467-8721.ep10770953>
- Hecht, M., & LaFrance, M. (1998). License or obligation to smile—the effect of power and sex on amount and type of smiling. *Personality and Social Psychology Bulletin*, 24(12), 1332–1342. <https://doi.org/https://doi.org/10.1177/01461672982412007>
- Hess, U., & Bourgeois, P. (2010). You smile-I smile: Emotion expression in social interaction. *Biological Psychology*, 84(3), 514–520. <https://doi.org/10.1016/j.biopsycho.2009.11.001>
- Jahng, J., Kralik, J. D., Hwang, D. U., & Jeong, J. (2017). Neural dynamics of two players when using nonverbal cues to gauge intentions to cooperate during the Prisoner's Dilemma Game. *NeuroImage*, 157(June), 263–274. <https://doi.org/10.1016/j.neuroimage.2017.06.024>
- Järvelä, S., Kivikangas, J. M., Kätsyri, J., & Ravaja, N. (2014). Physiological Linkage of Dyadic Gaming Experience. *Simulation and Gaming*, 45(1), 24–40. <https://doi.org/10.1177/1046878113513080>
- JASP-Team. (2019). JASP (Version 0.10).
- Jorgenson, D. O., & Papciak, A. S. (1981). The effects of communication, resource feedback, and identifiability on behavior in a simulated commons. *Journal of Experimental Social Psychology*, 17(4), 373–385. [https://doi.org/10.1016/0022-1031\(81\)90044-5](https://doi.org/10.1016/0022-1031(81)90044-5)

- Kang, O., & Wheatley, T. (2015). Pupil dilation patterns reflect the contents of consciousness. *Consciousness and Cognition*, 35(May 2015), 128–135. <https://doi.org/10.1016/j.concog.2015.05.001>
- Kang, O., & Wheatley, T. (2017). Pupil dilation patterns spontaneously synchronize across individuals during shared attention. *Journal of Experimental Psychology: General*, 146(4), 569–576. <https://doi.org/10.1037/xge0000271>
- Kaufmann, H. (1967). Similarity and cooperation received as determinants of cooperation rendered. *Psychonomic Science*, 9(2), 73–74. <https://doi.org/https://doi.org/10.3758/BF03330765>
- Kerby, D. S. (2014). The Simple Difference Formula: An Approach to Teaching Nonparametric Correlation. *Comprehensive Psychology*, 3(1), 1–9. <https://doi.org/10.2466/11.it.3.1>
- Kiesler, S., Sproull, L., & Waters, K. (1996). A prisoner's dilemma experiment on cooperation with people and human-like computers. *Journal of Personality and Social Psychology*, 70(1), 47–65. <https://doi.org/10.1037/0022-3514.70.1.47>
- Kleinke, C. L. (1986). Gaze and eye contact: A research review. *Psychological Bulletin*, 100(1), 78–100. <https://doi.org/10.1037//0033-2909.100.1.78>
- Kreibig, S. D. (2010). Autonomic nervous system activity in emotion: A review. *Biological Psychology*, 84(3), 394–421. <https://doi.org/10.1016/j.biopsycho.2010.03.010>
- Kret, M. E. (2015). Emotional expressions beyond facial muscle actions. A call for studying autonomic signals and their impact on social perception. *Frontiers in Psychology*, 6(May), 1–10. <https://doi.org/10.3389/fpsyg.2015.00711>
- Kret, M. E., & De Dreu, C. K. W. (2017). Pupil-mimicry conditions trust in partners: Moderation by oxytocin and group membership. *Proceedings of the Royal Society B: Biological Sciences*, 284(1850), 1–10. <https://doi.org/10.1098/rspb.2016.2554>
- Kret, M. E., Fischer, A. H., & De Dreu, C. K. W. (2015). Pupil Mimicry Correlates With Trust in In-Group Partners With Dilating Pupils. *Psychological Science*, 26(9), 1401–1410. <https://doi.org/10.1177/0956797615588306>
- Kret, M. E., Stekelenburg, J. J., De Gelder, B., & Roelofs, K. (2017). From face to hand: Attentional bias towards expressive hands in social anxiety. *Biological Psychology*, 122, 42–50. <https://doi.org/10.1016/j.biopsycho.2015.11.016>
- Kret, M. E., Tomonaga, M., & Matsuzawa, T. (2014). Chimpanzees and Humans Mimic Pupil-Size of Conspecifics. *PLoS ONE*, 9(8), e104886. <https://doi.org/10.1371/journal.pone.0104886>
- Krumhuber, E., Manstead, A. S. R., Cosker, D., Marshall, D., Rosin, P. L., & Kappas, A. (2007). Facial Dynamics as Indicators of Trustworthiness and Cooperative Behavior. *Emotion*, 7(4), 730–735. <https://doi.org/10.1037/1528-3542.7.4.730>
- Lakin, J. L., & Chartrand, T. L. (2003). Using nonconscious behavioral mimicry to create affiliation and rapport. *Psychological Science*, 14(4), 334–339. <https://doi.org/10.1111/1467-9280.14481>
- Lang, P. J., Greenwald, M. K., Bradley, M. M., & Hamm, A. O. (1993). Looking at pictures: Affective, facial, visceral, and behavioral reactions. *Psychophysiology*, 30(3), 261–273. <https://doi.org/10.1111/j.1469-8986.1993.tb03352.x>
- Lee-Helm, J., Miller, J. G., Kahle, S., Troxel, N. R., & Hastings, P. D. (2018). On Measuring and Modeling Physiological Synchrony in Dyads. *Multivariate Behavioral Research*, 0, 1–23. <https://doi.org/10.1080/00273171.2018.1459292>

- Leiberg, S., Klimecki, O., & Singer, T. (2011). Short-term compassion training increases prosocial behavior in a newly developed prosocial game. *PLoS ONE*, 6(3). <https://doi.org/10.1371/journal.pone.0017798>
- Lenth, R. V. (2007). *Post Hoc Power: Tables and Commentary*. Department of Statistics and Actuarial Science, University of Iowa.
- Lev-on, A., Chavez, A., & Bicchieri, C. (2010). Group and Dyadic Communication in Trust Games. *Rationality and Society*, 22(1), 37–54. <https://doi.org/10.1177/1043463109337100>
- Levenson, R. W., & Gottman, J. M. (1983). Marital Interaction- Physiological Linkage and Affective Exchange. *Journal of Personality and Social Psychology*, 45(3), 587–597.
- Lewkowicz, D., Quesque, F., Coello, Y., & Delevoeye-Turrell, Y. N. (2015). Individual differences in reading social intentions from motor deviants. *Frontiers in Psychology*, 6. <https://doi.org/10.3389/fpsyg.2015.01175>
- Loewenstein, G., & Lerner, J. (2003). The role of affect in decision making. In *Handbook of Affective Sciences* (pp. 619–642). Oxford University Press. <https://doi.org/10.1016/B978-0-444-62604-2.00003-4>
- Lorah, J. (2018). Effect size measures for multilevel models: definition, interpretation, and TIMSS example. *Large-Scale Assessments in Education*, 6(8), 1–11. <https://doi.org/10.1186/s40536-018-0061-2>
- Mancini, G., Ferrari, P. F., & Palagi, E. (2013). Rapid facial mimicry in geladas. *Scientific Reports*, 3, 1–6. <https://doi.org/10.1038/srep01527>
- Mathôt, S. (2018). Pupillometry: Psychology, Physiology, and Function. *Journal of Cognition*, 1(1), 1–23. <https://doi.org/10.5334/joc.18>
- McAssey, M. P., Helm, J., Hsieh, F., Sbarra, D. A., & Ferrer, E. (2013). Methodological advances for detecting physiological synchrony during dyadic interactions. *Methodology*, 9(2), 41–53. <https://doi.org/10.1027/1614-2241/a000053>
- McClung, J. S., Placi, S., Bangertner, A., Clément, F., & Bshary, R. (2017). The language of cooperation: Shared intentionality drives variation in helping as a function of group membership. *Proceedings of the Royal Society B: Biological Sciences*, 284(1863). <https://doi.org/10.1098/rspb.2017.1682>
- Mitkidis, P., McGraw, J. J., Roepstorff, A., & Wallot, S. (2015). Building trust: Heart rate synchrony and arousal during joint action increased by public goods game. *Physiology and Behavior*, 149, 101–106. <https://doi.org/10.1016/j.physbeh.2015.05.033>
- Mogan, R., Fischer, R., & Bulbulia, J. A. (2017). To be in synchrony or not? A meta-analysis of synchrony's effects on behavior, perception, cognition and affect. *Journal of Experimental Social Psychology*, 72(September 2016), 13–20. <https://doi.org/10.1016/j.jesp.2017.03.009>
- Mønster, D., Håkansson, D. D., Eskildsen, J. K., & Wallot, S. (2016). Physiological evidence of interpersonal dynamics in a cooperative production task. *Physiology and Behavior*, 156, 24–34. <https://doi.org/10.1016/j.physbeh.2016.01.004>
- Monterosso, J., Ainslie, G., Pamela Toppi Mullen, P. A. C., & Gault, B. (2002). The fragility of cooperation: A false feedback study of a sequential iterated prisoner's dilemma. *Journal of Economic Psychology*, 23(4), 437–448. [https://doi.org/10.1016/S0167-4870\(02\)00095-8](https://doi.org/10.1016/S0167-4870(02)00095-8)
- Moulder, R. G., Boker, S. M., Ramseyer, F., & Tschacher, W. (2018). Determining synchrony between behavioral time series: An application of surrogate data generation for establishing falsifiable null-hypotheses. *Psychological Methods*, 23(4), 757–773. <https://doi.org/10.1037/met0000172>

- Myllyneva, A., & Hietanen, J. K. (2015). There is more to eye contact than meets the eye. *Cognition*, *134*, 100–109. <https://doi.org/10.1016/j.cognition.2014.09.011>
- Neal, D. T., & Chartrand, T. L. (2011). Embodied emotion perception: Amplifying and dampening facial feedback modulates emotion perception accuracy. *Social Psychological and Personality Science*, *2*(6), 673–678. <https://doi.org/10.1177/1948550611406138>
- Nevicka, B., Ten Velden, F. S., de Hoogh, A. H. B., & van Vianen, A. E. M. (2011). Reality at odds with perceptions: Narcissistic leaders and group performance. *Psychological Science*, *22*(10), 1259–1264. <https://doi.org/10.1177/0956797611417259>
- Oberman, L. M., Winkelman, P., & Ramachandran, V. S. (2009). Slow echo: facial EMG evidence for the delay of spontaneous, but not voluntary, emotional mimicry in children with autism spectrum disorders. *Developmental Science*, *12*(4), 510–520. <https://doi.org/10.1111/j.1467-7687.2008.00796.x>
- Oliva, M., & Anikin, A. (2018). Pupil dilation reflects the time course of emotion recognition in human vocalizations. *Scientific Reports*, *8*(1), 1–10. <https://doi.org/10.1038/s41598-018-23265-x>
- Osborne, J. W., & Costello, A. B. (2004). Sample size and subject to item ratio in principal components analysis. *Practical Assessment, Research and Evaluation*, *9*(11). <https://doi.org/https://doi.org/10.7275/ktzq-jq66>
- Palagi, E., Leone, A., Mancini, G., & Ferrari, P. F. (2009). Contagious yawning in gelada baboons as a possible expression of empathy. *Proceedings of the National Academy of Sciences*, *106*(46), 19262–19267. <https://doi.org/10.1073/pnas.0910891106>
- Palumbo, R. V., Marraccini, M. E., Weyandt, L. L., Wilder-Smith, O., McGee, H. A., Liu, S., & Goodwin, M. S. (2017). Interpersonal autonomic physiology: A systematic review of the literature. *Personality and Social Psychology Review*, *21*(2), 99–141. <https://doi.org/10.1177/1088868316628405>
- Parks, C. D., & Vu, A. D. (1994). Social dilemma behavior of individuals from highly individualist and collectivist cultures. *Journal of Conflict Resolution*, *38*(4), 708–718. <https://doi.org/10.1177/0022002794038004006>
- Penner, L. A., Dovidio, J. F., Piliavin, J. A., & Schroeder, D. A. (2005). Prosocial Behavior: Multilevel Perspectives. *Annual Review of Psychology*, *56*(1), 365–392. <https://doi.org/10.1146/annurev.psych.56.091103.070141>
- Peysakhovich, A., Nowak, M. A., & Rand, D. G. (2014). Humans display a “cooperative phenotype” that is domain general and temporally stable. *Nature Communications*, *5*, 1–8. <https://doi.org/10.1038/ncomms5939>
- Pierce, T. (2009). Social anxiety and technology: Face-to-face communication versus technological communication among teens. *Computers in Human Behavior*, *25*(6), 1367–1372. <https://doi.org/10.1016/j.chb.2009.06.003>
- Pillutla, M. M., & Chen, X.-P. (1999). Social Norms and Cooperation in Social Dilemmas: The Effects of Context and Feedback. *Organizational Behavior and Human Decision Processes*, *78*(2), 81–103. <https://doi.org/10.1006/obhd.1999.2825>
- Plate, J. D. J., Borggreve, A. S., van Hillegersberg, R., & Peelen, L. M. (2019). Post Hoc Power Calculation: Observing the Expected. *Annals of Surgery*, *269*(1), 11. <https://doi.org/10.1097/SLA.0000000000002910>

- Poncela-Casasnovas, J., Gutiérrez-Roig, M., Gracia-Lázaro, C., Vicens, J., Gómez-Gardeñes, J., Perelló, J., ... Sánchez, A. (2016). Humans display a reduced set of consistent behavioral phenotypes in dyadic games. *Science Advances*, 2(8), 1–9. <https://doi.org/10.1126/sciadv.1600451>
- Posada-Quintero, H. F., Florian, J. P., Orjuela-Cañón, A. D., Aljama-Corrales, T., Charleston-Villalobos, S., & Chon, K. H. (2016). Power Spectral Density Analysis of Electrodermal Activity for Sympathetic Function Assessment. *Annals of Biomedical Engineering*, 44(10), 3124–3135. <https://doi.org/10.1007/s10439-016-1606-6>
- Preston, S. D., & de Waal, F. B. M. (2002). Empathy: Its ultimate and proximate bases. *Behavioral and Brain Sciences*, 25(1), 1–72. <https://doi.org/10.1017/S0140525X02000018>
- Prochazkova, E., & Kret, M. E. (2017). Connecting minds and sharing emotions through mimicry: A neurocognitive model of emotional contagion. *Neuroscience and Biobehavioral Reviews*, 80(April), 99–114. <https://doi.org/10.1016/j.neubiorev.2017.05.013>
- Prochazkova, E., Prochazkova, L., Giffin, M. R., Scholte, H. S., De Dreu, C. K. W., & Kret, M. E. (2018). Pupil mimicry promotes trust through the theory-of-mind network. *Proceedings of the National Academy of Sciences*, 115(31), E7265–E7274. <https://doi.org/10.1073/pnas.1803916115>
- Prochazkova, E., Sjak-Shie, E. E., Behrens, F., Lindh, D., & Kret, M. E. (2019). The choreography of human attraction : physiological synchrony in a blind date setting, 1–33. <https://doi.org/http://dx.doi.org/10.1101/748707>
- Quesque, F., Behrens, F., & Kret, M. E. (2019). Pupils say more than a thousand words: Pupil size reflects how observed actions are interpreted. *Cognition*, 190(April), 93–98. <https://doi.org/10.1016/j.cognition.2019.04.016>
- Ramseyer, F., & Tschacher, W. (2011). Nonverbal synchrony in psychotherapy: Coordinated body movement reflects relationship quality and outcome. *Journal of Consulting and Clinical Psychology*, 79(3), 284–295. <https://doi.org/10.1037/a0023419>
- Reed, L. I., Zeglen, K. N., & Schmidt, K. L. (2012). Facial expressions as honest signals of cooperative intent in a one-shot anonymous Prisoner's Dilemma game. *Evolution and Human Behavior*, 33(3), 200–209. <https://doi.org/10.1016/j.evolhumbehav.2011.09.003>
- Rennung, M., & Göritz, A. S. (2016). Prosocial consequences of interpersonal synchrony: A Meta-Analysis. *Zeitschrift Für Psychologie / Journal of Psychology*, 224(3), 168–189. <https://doi.org/10.1027/2151-2604/a000252>
- Rilling, J. K., Goldsmith, D. R., Glenn, A. L., Jairam, M. R., Elfenbein, H. A., Dagenais, J. E., ... Pagnoni, G. (2008). The neural correlates of the affective response to unreciprocated cooperation. *Neuropsychologia*, 46(5), 1256–1266. <https://doi.org/10.1016/j.neuropsychologia.2007.11.033>
- Robinson, J. W., Herman, A., & Kaplan, B. J. (1982). Autonomic responses correlate with counselor-client empathy. *Journal of Counseling Psychology*, 29(2), 195–198. <https://doi.org/10.1037/0022-0167.29.2.195>
- Saleem, M., Anderson, C. A., & Barlett, C. P. (2015). Assessing Helping and Hurting Behaviors Through the Tangram Help/Hurt Task. *Personality and Social Psychology Bulletin*, 41(10), 1345–1362. <https://doi.org/10.1177/0146167215594348>
- Sally, D. (1995). Conversation and cooperation in social dilemmas—a meta-analysis of experiments from 1958 to 1992. *Rationality and Society*, 7(1), 58–92. <https://doi.org/10.1177/0049124187016001006>

- Sánchez-Amaro, A., Duguid, S., Call, J., & Tomasello, M. (2019). Chimpanzees and children avoid mutual defection in a social dilemma. *Evolution and Human Behavior*, *40*(1), 46–54. <https://doi.org/10.1016/j.evolhumbehav.2018.07.004>
- Scharlemann, P. W., Eckel, C. C., Kacelnik, A., & Wilson, R. K. (2001). The value of a smile: Game theory with a human face. *Journal of Economic Psychology*, *22*, 617–640. [https://doi.org/10.1016/S0167-4870\(01\)00059-9](https://doi.org/10.1016/S0167-4870(01)00059-9)
- Schoeneberger, J. A. (2016). The Impact of Sample Size and Other Factors When Estimating Multilevel Logistic Models. *Journal of Experimental Education*, *84*(2), 373–397. <https://doi.org/10.1080/00220973.2015.1027805>
- Schoenherr, D., Paulick, J., Strauss, B. M., Deisenhofer, A. K., Schwartz, B., Rubel, J. A., ... Altmann, U. (2019). Identification of movement synchrony: Validation of windowed cross-lagged correlation and -regression with peak-picking algorithm. *PLoS ONE*, *14*(2), 1–24. <https://doi.org/10.1371/journal.pone.0211494>
- Schoenherr, D., Paulick, J., Worrack, S., Strauss, B. M., Rubel, J. A., Schwartz, B., ... Altmann, U. (2018). Quantification of nonverbal synchrony using linear time series analysis methods: Lack of convergent validity and evidence for facets of synchrony. *Behavior Research Methods*, *51*(1), 361–383. <https://doi.org/10.3758/s13428-018-1139-z>
- Schönbrodt, F. D., & Perugini, M. (2013). At what sample size do correlations stabilize? *Journal of Research in Personality*, *47*(5), 609–612. <https://doi.org/10.1016/j.jrp.2013.05.009>
- Scott-Phillips, T. C., Blythe, R. A., Gardner, A., & West, S. A. (2012). How do communication systems emerge? *Proceedings of the Royal Society B: Biological Sciences*, *279*(1735), 1943–1949. <https://doi.org/10.1098/rspb.2011.2181>
- Sheather, S. (2009). *A modern approach to regression with R*. Springer Science & Business Media. <https://doi.org/10.1007/978-0-387-09608-7>
- Shih, E. W., Quiñones-Camacho, L. E., Karan, A., & Davis, E. L. (2019). Physiological contagion in parent-child dyads during an emotional challenge. *Social Development*, (December 2018), 1–17. <https://doi.org/10.1111/sode.12359>
- Sjak-Shie, E. E. (2017). *PhysioData Toolbox 0.3.5*.
- Smith, D., Schlaepfer, P., Major, K., Dyble, M., Page, A. E., Thompson, J., ... Migliano, A. B. (2017). Cooperation and the evolution of hunter-gatherer storytelling. *Nature Communications*, *8*(1). <https://doi.org/10.1038/s41467-017-02036-8>
- Sparks, A., Burleigh, T., & Barclay, P. (2016). We can see inside: Accurate prediction of Prisoner's Dilemma decisions in announced games following a face-to-face interaction. *Evolution and Human Behavior*, *37*(3), 210–216. <https://doi.org/10.1016/j.evolhumbehav.2015.11.003>
- Sprecher, S. (2014). Initial interactions online-text, online-audio, online-video, or face-to-face: Effects of modality on liking, closeness, and other interpersonal outcomes. *Computers in Human Behavior*, *31*(1), 190–197. <https://doi.org/10.1016/j.chb.2013.10.029>
- Stasser, G., & Titus, W. (1985). Pooling of unshared information in group decision making: Biased information sampling during discussion. *Journal of Personality and Social Psychology*, *48*(6), 1467–1478. <https://doi.org/10.4324/9780203647585>

- Stoop, J. (2014). From the lab to the field: Envelopes, dictators and manners. *Experimental Economics*, 17(2), 304–313. <https://doi.org/10.1007/s10683-013-9368-6>
- Sylwester, K., Lyons, M., Buchanan, C., Nettle, D., & Roberts, G. (2012). The role of Theory of Mind in assessing cooperative intentions. *Personality and Individual Differences*, 52(2), 113–117. <https://doi.org/10.1016/j.paid.2011.09.005>
- Tarr, B., Launay, J., & Dunbar, R. I. M. (2016a). Silent disco: dancing in synchrony leads to elevated pain thresholds and social closeness. *Evolution and Human Behavior*, 37(5), 343–349. <https://doi.org/10.1016/j.evolhumbehav.2016.02.004>
- Tarr, B., Launay, J., & Dunbar, R. I. M. (2016b). Silent disco: dancing in synchrony leads to elevated pain thresholds and social closeness. *Evolution and Human Behavior*, 37(5), 343–349. <https://doi.org/10.1016/j.evolhumbehav.2016.02.004>
- Tedeschi, J., Lesnick, S., & Gahagan, J. (1968). Feedback and “washout” effects in the Prisoner’s Dilemma game. *Journal of Personality and Social Psychology*, 10(1), 31–34. <https://doi.org/10.1037/h0026312>
- Thorson, K. R., West, T. V., & Mendes, W. B. (2017). Measuring Physiological Influence in Dyads: A Guide to Designing, Implementing, and Analyzing Dyadic Physiological Studies. *Psychological Methods*. <https://doi.org/10.1037/met0000166>
- Thorson, K. R., West, T. V., & Mendes, W. B. (2018). Measuring physiological influence in dyads: A guide to designing, implementing, and analyzing dyadic physiological studies. *Psychological Methods*, 23(4), 595–616. <https://doi.org/10.1037/met0000166>
- Toma, C., & Butera, F. (2009). Hidden profiles and concealed information: Strategic information sharing and use in group decision making. *Personality and Social Psychology Bulletin*, 35(6), 793–806. <https://doi.org/10.1177/0146167209333176>
- Van Kleef, G. A. (2010). The Emerging View of Emotion as Social Information. *Social and Personality Psychology Compass*, 4(5), 331–343. <https://doi.org/10.1111/j.1751-9004.2010.00262.x>
- van Lange, P. A. M. (1999). The Pursuit of Joint Outcomes and Equality of Outcomes: An Integrative Model of Social Value Orientation. *Journal of Personality and Social Psychology*, 77(2), 337–349. <https://doi.org/https://doi.org/10.1037/0022-3514.77.2.337>
- Van Lange, P. A. M. (2000). Beyond Self-interest: A Set of Propositions Relevant to Interpersonal Orientations. *European Review of Social Psychology*, 11(1), 297–331. <https://doi.org/10.1080/14792772043000068>
- Van Lange, P. A. M., Bekkers, R., Schuyt, T. N. M., & Van Vugt, M. (2007). From games to giving: Social value orientation predicts donations to noble causes. *Basic and Applied Social Psychology*, 29(4), 375–384. <https://doi.org/10.1080/01973530701665223>
- Van Lange, P. A. M., De Bruin, E. M. N., Otten, W., & Joireman, J. A. (1997). Development of prosocial, individualistic, and competitive orientations: Theory and preliminary evidence. *Journal of Personality and Social Psychology*, 73(4), 733–746. <https://doi.org/10.1037/0022-3514.73.4.733>
- Vanutelli, M. E., Gatti, L., Angioletti, L., & Balconi, M. (2017). Affective Synchrony and Autonomic Coupling during Cooperation: A Hyperscanning Study. *BioMed Research International*, 1–10. <https://doi.org/10.1155/2017/3104564>
- Verplaetse, J., Vanneste, S., & Braeckman, J. (2007). You can judge a book by its cover: the sequel. A kernel of truth in predictive cheating detection. *Evolution and Human Behavior*, 28(4), 260–271. <https://doi.org/10.1016/j.evolhumbehav.2007.04.006>

- Vink, R., Hasselman, F., Cillessen, A. H. N., Wijnants, M. L., & Bosman, A. M. T. (2018). Does competence determine who leads in a dyadic cooperative task? A study of children with and without a neurodevelopmental disorder. *Complexity*, 2018. <https://doi.org/10.1155/2018/5379531>
- Volk, S., Thöni, C., & Ruigrok, W. (2012). Temporal stability and psychological foundations of cooperation preferences. *Journal of Economic Behavior and Organization*, 81(2), 664–676. <https://doi.org/10.1016/j.jebo.2011.10.006>
- Voncken, M. J., & Bögels, S. M. (2009). Physiological blushing in social anxiety disorder patients with and without blushing complaints: Two subtypes? *Biological Psychology*, 81(2), 86–94. <https://doi.org/10.1016/j.biopsycho.2009.02.004>
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54(6), 1063–1070. <https://doi.org/10.1037/0022-3514.54.6.1063>
- Wehebrink, K. S., Koelkebeck, K., Piest, S., De Dreu, C. K. W., & Kret, M. E. (2018). Pupil mimicry and trust—Implication for depression. *Journal of Psychiatric Research*, 97, 70–76. <https://doi.org/https://doi.org/10.1016/j.jpsychires.2017.11.007>
- Werner, N. S., Duschek, S., & Schandry, R. (2009). Relationships between affective states and decision-making. *International Journal of Psychophysiology*, 74(3), 259–265. <https://doi.org/10.1016/j.ijpsycho.2009.09.010>
- Wittenbaum, G. M., Hollingshead, A. B., & Botero, I. C. (2004). From cooperative to motivated information sharing in groups: Moving beyond the hidden profile paradigm. *Communication Monographs*, 71(3), 286–310. <https://doi.org/10.1080/0363452042000299894>
- Wood, A., Rychlowska, M., Korb, S., & Niedenthal, P. (2016). Fashioning the Face: Sensorimotor Simulation Contributes to Facial Expression Recognition. *Trends in Cognitive Sciences*, 20(3), 227–240. <https://doi.org/10.1016/j.tics.2015.12.010>
- Yamagishi, T., Mifune, N., Li, Y., Shinada, M., Hashimoto, H., Horita, Y., ... Simunovic, D. (2013). Is behavioral pro-sociality game-specific? Pro-social preference and expectations of pro-sociality. *Organizational Behavior and Human Decision Processes*, 120(2), 260–271. <https://doi.org/10.1016/j.obhdp.2012.06.002>