



Universiteit
Leiden
The Netherlands

The (un)willingness to reward cooperation and punish non-cooperation

Molenmaker, Welmer E.

Citation

Molenmaker, W. E. (2017, January 19). *The (un)willingness to reward cooperation and punish non-cooperation*. *Kurt Lewin Institute Dissertation Series*. Retrieved from <https://hdl.handle.net/1887/45536>

Version: Not Applicable (or Unknown)

License: [Licence agreement concerning inclusion of doctoral thesis in the Institutional Repository of the University of Leiden](#)

Downloaded from: <https://hdl.handle.net/1887/45536>

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

Cover Page



Universiteit Leiden



The handle <http://hdl.handle.net/1887/45536> holds various files of this Leiden University dissertation

Author: Molenmaker, Welmer E.

Title: The (un)willingness to reward cooperation and punish non-cooperation

Issue Date: 2017-01-19



References



■ References

- Abbink, K., Bolton, G. E., Sadrieh, A., & Tang, F. F. (2001). Adaptive learning versus punishment in ultimatum bargaining. *Games and Economic Behavior*, 37(1), 1-25. doi: 10.1006/game.2000.0837
- Abbink, K., Irlenbusch, B., & Renner, E. (2000). The moonlighting game - An experimental study on reciprocity and retribution. *Journal of Economic Behavior & Organization*, 42(2), 265-277. doi: 10.1016/s0167-2681(00)00089-5
- Andreoni, J., & Gee, L. K. (2012). Gun for hire: Delegated enforcement and peer punishment in public goods provision. *Journal of Public Economics*, 96(11-12), 1036-1046. doi: 10.1016/j.jpubeco.2012.08.003
- Atwater, L. E., Waldman, D. A., Carey, J. A., & Cartier, P. (2001). Recipient and observer reactions to discipline: Are managers experiencing wishful thinking? *Journal of Organizational Behavior*, 22(3), 249-270. doi: 10.1002/job.67
- Baldwin, D. A. (1971). The power of positive sanctions. *World Politics*, 24, 19-38. doi: 10.2307/2009705
- Balliet, D. (2010). Communication and cooperation in social dilemmas: A meta-analytic review. *Journal of Conflict Resolution*, 54(1), 39-57. doi: 10.1177/0022002709352443
- Balliet, D., Mulder, L. B., & Van Lange, P. A. M. (2011). Reward, punishment, and cooperation: A meta-analysis. *Psychological Bulletin*, 137(4), 594-615. doi: 10.1037/a0023489
- Bandura, A., Underwood, B., & Fromson, M. E. (1975). Disinhibition of aggression through diffusion of responsibility and dehumanization of victims. *Journal of Research in Personality*, 9(4), 253-269. doi: 10.1016/0092-6566(75)90001-X
- Barclay, P., & Kiyonari, T. (2014). Why sanction? Functional causes of punishment and reward. In P. A. M. Van Lange, B. Rockenbach & T. Yamagishi (Eds.), *Reward and punishment in social dilemmas*. (pp. 182-196). New York, NY US: Oxford University Press. doi: 10.1093/acprof:oso/9780199300730.003.0010
- Barclay, P., & Van Vugt, M. (2015). The evolutionary psychology of human pro-sociality: Adaptations, byproducts, and mistakes. In D. A. Schroeder & W. G. Graziano (Eds.), *The Oxford Handbook of Prosocial Behavior* (pp. 37-60). Oxford, UK: Oxford University Press. doi: 10.1093/oxfordhb/9780195399813.013.029
- Baron, J. (1993). Heuristics and biases in equity judgments: A utilitarian approach. In B. A. Mellers & J. Baron (Eds.), *Psychological perspectives on justice: Theory and applications*. (pp. 109-137). New York, NY: Cambridge University Press. doi: 10.1017/CBO9780511552069.007
- Baron, J. (1995). Blind justice - Fairness to groups and the do-no-harm principle. *Journal of Behavioral Decision Making*, 8(2), 71-83. doi: 10.1002/bdm.3960080202

- Baron, J. (2012). Where do nonutilitarian moral rules come from? In J. I. Krueger (Ed.), *Social judgment and decision making*. (pp. 261-277). New York, NY: Psychology Press.
- Baron, J., & Jurney, J. (1993). Norms against voting for coerced reform. *Journal of Personality and Social Psychology*, 64(3), 347-355. doi: 10.1037/0022-3514.64.3.347
- Baron, J., & Ritov, I. (1994). Reference points and omission bias. *Organizational Behavior and Human Decision Processes*, 59(3), 475-498. doi: 10.1006/obhd.1994.1070
- Baron, J., & Ritov, I. (2004). Omission bias, individual differences, and normality. *Organizational Behavior and Human Decision Processes*, 94(2), 74-85. doi: 10.1016/j.obhdp.2004.03.003
- Baron, J., & Ritov, I. (2009). Protected values and omission bias as deontological judgments. In D. M. Bartels, B. C. W., L. J. Skitka & D. L. Medin (Eds.), *Moral judgment and decision making* (pp. 133-167). San Diego, CA: Elsevier Academic Press. doi: 10.1016/S0079-7421(08)00404-0
- Bartling, B., & Fischbacher, U. (2012). Shifting the blame: On delegation and responsibility. *Review of Economic Studies*, 79(1), 67-87. doi: 10.1093/restud/rdr023
- Bazerman, M. H., White, S. B., & Loewenstein, G. F. (1995). Perceptions of fairness in interpersonal and individual choice situations. *Current Directions in Psychological Science*, 4(2), 39-43. doi: 10.1111/1467-8721.ep10770996
- Blascovich, J. (2000). Using physiological indexes of psychological processes in social psychological research. In H. T. Reis & C. M. Judd (Eds.), *Handbook of research methods and personality psychology* (pp. 117-137). Cambridge, UK: Cambridge University Press.
- Blascovich, J., & Tomaka, J. (1996). The biopsychosocial model of arousal regulation. In M. P. Zanna (Ed.), *Advances in Experimental Social Psychology* (Vol. 28, pp. 1-51). San Diego, CA: Academic Press Inc. doi: 10.1016/S0065-2601(08)60235-X
- Blau, P. M. (1964). *Exchange and power in social life*. New York, NY: Wiley.
- Bone, J. E., & Raihani, N. J. (2015). Human punishment is motivated by both a desire for revenge and a desire for equality. *Evolution and Human Behavior*, 36(4), 323-330. doi: 10.1016/j.evolhumbehav.2015.02.002
- Boyd, R., Gintis, H., Bowles, S., & Richerson, P. J. (2003). The evolution of altruistic punishment. *Proceedings of the National Academy of Sciences of the United States of America*, 100(6), 3531-3535. doi: 10.1073/pnas.0630443100
- Boyd, R., & Richerson, P. J. (1992). Punishment allows the evolution of cooperation (or anything else) in sizable groups. *Ethology and Sociobiology*, 13(3), 171-195. doi: 10.1016/0162-3095(92)90032-y
- Brandts, J., & Charness, G. (2003). Truth or consequences: An experiment. *Management Science*, 49(1), 116-130. doi: 10.1287/mnsc.49.1.116.12755

- Brandts, J., & Charness, G. (2011). The strategy versus the direct-response method: A first survey of experimental comparisons. *Experimental Economics*, 14(3), 375-398. doi: 10.1007/s10683-011-9272-x
- Brosig, J., Weimann, J., & Yang, C.-L. (2003). The hot versus cold effect in a simple bargaining experiment. *Experimental Economics*, 6(1), 75-90. doi: 10.1023/A:1024204826499
- Brosig, J., Weimann, J., & Yang, C.-L. (2004). Communication, reputation, and punishment in sequential bargaining experiments. *Journal of Institutional and Theoretical Economics-Zeitschrift Für Die Gesamte Staatswissenschaft*, 160(4), 576-606. doi: 10.1628/0932456042776140
- Brown, G. R., & Richerson, P. J. (2014). Applying evolutionary theory to human behaviour: Past differences and current debates. *Journal of Bioeconomics*, 16(2), 105-128. doi: 10.1007/s10818-013-9166-4
- Büchner, S., Coricelli, G., & Greiner, B. (2007). Self-centered and other-regarding behavior in the solidarity game. *Journal of Economic Behavior & Organization*, 62(2), 293-303. doi: 10.1016/j.jebo.2004.12.006
- Buss, A. H. (1961). *The psychology of aggression*. New York, NY: John Wiley & Sons. doi: 10.1037/11160-000
- Camerer, C. F. (2003). *Behavioral game theory: Experiments in strategic interaction*. New York, NY: Russell Sage Foundation.
- Carlsmith, K. M. (2006). The roles of retribution and utility in determining punishment. *Journal of Experimental Social Psychology*, 42(4), 437-451. doi: 10.1016/j.jesp.2005.06.007
- Carlsmith, K. M., Darley, J. M., & Robinson, P. H. (2002). Why do we punish? Deterrence and just deserts as motives for punishment. *Journal of Personality and Social Psychology*, 83(2), 284-299. doi: 10.1037//0022-3514.83.2.284
- Casari, M., & Cason, T. N. (2009). The strategy method lowers measured trustworthy behavior. *Economics Letters*, 103(3), 157-159. doi: 10.1016/j.econlet.2009.03.012
- Charness, G., & Rabin, M. (2002). Understanding social preferences with simple tests. *Quarterly Journal of Economics*, 117(3), 817-869. doi: 10.1162/003355302760193904
- Chen, H., Cohen, P., & Chen, S. (2010). How big is a big odds ratio? Interpreting the magnitudes of odds ratios in epidemiological studies. *Communications in Statistics - Simulation and Computation*, 39, 860-864. doi: 10.1080/03610911003650383
- Chen, X.-P., Dang, C. T., & Keng-Highberger, F. (2014). Broadening the motivation to cooperate: Revisiting the role of sanctions in social dilemmas. In P. A. M. Van Lange, B. Rockenbach & T. Yamagishi (Eds.), *Reward and punishment in social dilemmas*. (pp. 115-132). New York, NY: Oxford University Press. doi: 10.1093/acprof:oso/9780199300730.003.0007
- Chen, X.-P., Pillutla, M. M., & Yao, X. (2009). Unintended consequences of cooperation inducing and maintaining mechanisms in public goods dilemmas: Sanctions and moral appeals. *Group Processes & Intergroup Relations*, 12(2), 241-255. doi: 10.1177/1368430208098783

- Cherry, T. L. (2001). Mental accounting and other-regarding behavior: Evidence from the lab. *Journal of Economic Psychology*, 22(5), 605-615.
- Cinyabuguma, M., Page, T., & Putterman, L. (2006). Can second-order punishment deter perverse punishment? *Experimental Economics*, 9(3), 265-279. doi: 10.1007/s10683-006-9127-z
- Cohen, J. D. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Earlbaum Associates.
- Crockett, M. J., Özdemir, Y., & Fehr, E. (2014). The value of vengeance and the demand for deterrence. *Journal of Experimental Psychology: General*, 143(6), 2279-2286. doi: 10.1037/xge0000018
- Cropanzano, R., & Mitchell, M. S. (2005). Social exchange theory: An interdisciplinary review. *Journal of Management*, 31(6), 874-900. doi: 10.1177/0149206305279602
- Crowe, B. L. (1969). The tragedy of the commons revisited. *Science*, 116(3909), 1103-1107. doi: 10.1126/science.166.3909.1103
- Cubitt, R. P., Drouvelis, M., & Gächter, S. (2011). Framing and free riding: emotional responses and punishment in social dilemma games. *Experimental Economics*, 14(2), 254-272. doi: 10.1007/s10683-010-9266-0
- Cushman, F., Young, L., & Hauser, M. (2006). The role of conscious reasoning and intuition in moral judgment testing three principles of harm. *Psychological Science*, 17(12), 1082-1089. doi: 10.1111/j.1467-9280.2006.01834.x
- Darley, J. M., & Latané, B. (1968). Bystander intervention in emergencies: Diffusion of responsibility. *Journal of Personality and Social Psychology*, 8(4), 377-383. doi: 10.1037/h0025589
- Darley, J. M., & Pittman, T. S. (2003). The psychology of compensatory and retributive justice. *Personality and Social Psychology Review*, 7(4), 324-336. doi: 10.1207/S15327957PSPR0704_05
- Darwin, C. (1859/1962). *The origin of species*. New York, NY: Collier Books.
- Dawes, C. T., Fowler, J. H., Johnson, T., McElreath, R., & Smirnov, O. (2007). Egalitarian motives in humans. *Nature*, 446(7137), 794-796. doi: 10.1038/nature05651
- Dawes, R. M. (1980). Social dilemmas. *Annual Review of Psychology*, 31, 169-193. doi: 10.1146/annurev.ps.31.020180.001125
- De Cremer, D., & Van Dijk, E. (2005). When and why leaders put themselves first: Leader behaviour in resource allocations as a function of feeling entitled. *European Journal of Social Psychology*, 35(4), 553-563. doi: 10.1002/ejsp.260
- De Kwaadsteniet, E. W., Rijkhoff, S. A. M., & Van Dijk, E. (2013). Equality as a benchmark for third-party punishment and reward: The moderating role of uncertainty in social dilemmas. *Organizational Behavior and Human Decision Processes*, 120(2), 251-259. doi: 10.1016/j.obhdp.2012.06.007

- De Kwaadsteniet, E. W., Van Dijk, E., Wit, A. P., & De Cremer, D. (2006). Social dilemmas as strong versus weak situations: Social value orientations and tacit coordination under resource size uncertainty. *Journal of Experimental Social Psychology*, 42(4), 509-516. doi: 10.1016/j.jesp.2005.06.004
- De Kwaadsteniet, E. W., Van Dijk, E., Wit, A. P., & De Cremer, D. (2008). 'How many of us are there?': Group size uncertainty and social value orientations in common resource dilemmas. *Group Processes & Intergroup Relations*, 11(3), 387-399. doi: 10.1177/1368430208090649
- De Kwaadsteniet, E. W., Van Dijk, E., Wit, A. P., & De Cremer, D. (2010). Anger and retribution after collective overuse: The role of blaming and environmental uncertainty in social dilemmas. *Personality and Social Psychology Bulletin*, 36(1), 59-70. doi: 10.1177/0146167209352192
- De Kwaadsteniet, E. W., Van Dijk, E., Wit, A. P., De Cremer, D., & De Rooij, M. (2007). Justifying decisions in social dilemmas: Justification pressures and tacit coordination under environmental uncertainty. *Personality and Social Psychology Bulletin*, 33(12), 1648-1660. doi: 10.1177/0146167207307490
- De Quervain, D. J. F., Fischbacher, U., Treyer, V., Schelhammer, M., Schnyder, U., Buck, A., & Fehr, E. (2004). The neural basis of altruistic punishment. *Science*, 305(5688), 1254-1258. doi: 10.1126/science.1100735
- Deci, E. L., Koestner, R., & Ryan, R. M. (1999). A meta-analytic review of experiments examining the effects of extrinsic rewards on intrinsic motivation. *Psychological Bulletin*, 125(6), 627-668. doi: 10.1037/0033-2909.125.6.627
- Deci, E. L., & Ryan, R. M. (2000). The 'what' and 'why' of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227. doi: 10.1207/S15327965PLI1104_01
- Delton, A. W., Krasnow, M. M., Cosmides, L., & Tooby, J. (2011). Evolution of direct reciprocity under uncertainty can explain human generosity in one-shot encounters. *Proceedings of the National Academy of Sciences of the United States of America*, 108(32), 13335-13340. doi: 10.1073/pnas.1102131108
- Denant-Boemont, L., Masclet, D., & Noussair, C. N. (2007). Punishment, counterpunishment and sanction enforcement in a social dilemma experiment. *Economic Theory*, 33(1), 145-167. doi: 10.1007/s00199-007-0212-0
- Edney, J. J., & Harper, C. S. (1978). The commons dilemma: A review of contributions from psychology. *Environmental Management*, 2(6), 491-507. doi: 10.1007/BF01866708
- Effron, D. A., & Miller, D. T. (2015). Do as I say, not as I've done: Suffering for a misdeed reduces the hypocrisy of advising others against it. *Organizational Behavior and Human Decision Processes*, 131, 16-32. doi: 10.1016/j.obhdp.2015.07.004

- Eisenberger, R., Lynch, P., Aselage, J., & Rohdieck, S. (2004). Who takes the most revenge? Individual differences in negative reciprocity norm endorsement. *Personality and Social Psychology Bulletin*, 30(6), 789-799. doi: 10.1177/0146167204264047
- Eriksson, K., Andersson, P. A., & Strimling, P. (2015). Moderators of the disapproval of peer punishment. *Group Processes & Intergroup Relations*, 19(2), 152-168. doi: 10.1177/1368430215583519
- Falk, A., Fehr, E., & Fischbacher, U. (2005). Driving forces behind informal sanctions. *Econometrica*, 73(6), 2017-2030. doi: 10.1111/j.1468-0262.2005.00644.x
- Fehr, E., & Fischbacher, U. (2004). Third-party punishment and social norms. *Evolution and Human Behavior*, 25(2), 63-87. doi: 10.1016/s1090-5138(04)00005-4
- Fehr, E., Fischbacher, U., & Gächter, S. (2002). Strong reciprocity, human cooperation, and the enforcement of social norms. *Human Nature*, 13(1), 1-25. doi: 10.1007/s12110-002-1012-7
- Fehr, E., & Gächter, S. (2000). Cooperation and punishment in public goods experiments. *American Economic Review*, 90(4), 980-994. doi: 10.1257/aer.90.4.980
- Fehr, E., & Gächter, S. (2002). Altruistic punishment in humans. *Nature*, 415(6868), 137-140. doi: 10.1038/415137a
- Fehr, E., & Henrich, J. (2003). Is strong reciprocity a maladaptation? On the evolutionary foundations of human altruism. In P. Hammerstein (Ed.), *Genetic and cultural evolution of cooperation*. (pp. 55-82). Cambridge, MA: MIT Press.
- Fehr, E., & Rockenbach, B. (2004). Human altruism: economic, neural, and evolutionary perspectives. *Current Opinion in Neurobiology*, 14(6), 784-790. doi: 10.1016/j.conb.2004.10.007
- Fehr, E., & Schmidt, K. M. (1999). A theory of fairness, competition, and cooperation. *Quarterly Journal of Economics*, 114(3), 817-868. doi: 10.1162/003355399556151
- Fershtman, C., & Gneezy, U. (2001). Strategic delegation: An experiment. *Rand Journal of Economics*, 32(2), 352-368. doi: 10.2307/2696414
- Festinger, L., Pepitone, A., & Newcomb, T. (1952). Some consequences of de-individuation in a group. *The Journal of Abnormal and Social Psychology*, 47(2), 382-389. doi: 10.1037/h0057906
- Fischbacher, U., Gächter, S., & Quercia, S. (2012). The behavioral validity of the strategy method in public good experiments. *Journal of Economic Psychology*, 33(4), 897-913. doi: 10.1016/j.joep.2012.04.002
- Forsyth, D. R., Zyzanski, L. E., & Giammanco, C. A. (2002). Responsibility diffusion in cooperative collectives. *Personality and Social Psychology Bulletin*, 28(1), 54-65. doi: 10.1177/0146167202281005
- Fox, D. R. (1985). Psychology, ideology, utopia, and the commons. *American Psychologist*, 40(1), 48-58. doi: 10.1037/0003-066X.40.1.48

- Fridhandler, B. M., & Averill, J. R. (1982). Temporal dimensions of anger: An exploration of time and emotion. In J. R. Averill (Ed.), *Anger and Aggression* (pp. 253-280). New York, NY: Springer-Verlag. doi: 10.1007/978-1-4612-5743-1_12
- Gächter, S., & Herrmann, B. (2009). Reciprocity, culture and human cooperation: Previous insights and a new cross-cultural experiment. *Philosophical Transactions of the Royal Society B-Biological Sciences*, 364(1518), 791-806. doi: 10.1098/rstb.2008.0275
- Gächter, S., Renner, E., & Sefton, M. (2008). The long-run benefits of punishment. *Science*, 322(5907), 1510-1510. doi: 10.1126/science.1164744
- Gerard, H. B., & Hoyt, M. F. (1974). Distinctiveness of social categorization and attitude toward ingroup members. *Journal of Personality and Social Psychology*, 29(6), 836-842. doi: 10.1037/h0036204
- Gintis, H. (2000). Strong reciprocity and human sociality. *Journal of Theoretical Biology*, 206(2), 169-179. doi: 10.1006/jtbi.2000.2111
- Gintis, H. (2003). The Hitchhiker's guide to altruism: Gene-culture coevolution, an the internalization of norms. *Journal of Theoretical Biology*, 220(4), 407-418. doi: 10.1006/jtbi.2003.3104
- Gintis, H., Bowles, S., Boyd, R., & Fehr, E. (2003). Explaining altruistic behavior in humans. *Evolution and Human Behavior*, 24(3), 153-172. doi: 10.1016/s1090-5138(02)00157-5
- Gintis, H., Henrich, J., Bowles, S., Boyd, R., & Fehr, E. (2008). Strong reciprocity and the roots of human morality. *Social Justice Research*, 21(2), 241-253. doi: 10.1007/s11211-008-0067-y
- Gneezy, U., & Rustichini, A. (2000). A fine is a price. *Journal of Legal Studies*, 29(1), 1-17. doi: 10.1086/468061
- Goodwin, G. P., & Darley, J. M. (2012). Why are some moral beliefs perceived to be more objective than others? *Journal of Experimental Social Psychology*, 48(1), 250-256. doi: 10.1016/j.jesp.2011.08.006
- Gouldner, A. W. (1960). The norm of reciprocity - A preliminary statement. *American Sociological Review*, 25(2), 161-178. doi: 10.2307/2092623
- Greene, J. D., Nystrom, L. E., Engell, A. D., Darley, J. M., & Cohen, J. D. (2004). The neural bases of cognitive conflict and control in moral judgment. *Neuron*, 44(2), 389-400. doi: 10.1016/j.neuron.2004.09.027
- Greenland, S., Schwartzbaum, J. A., & Finkle, W. D. (2000). Problems due to small samples and sparse data in conditional logistic regression analysis. *American Journal of Epidemiology*, 151(5), 531-539. doi: 10.1093/oxfordjournals.aje.a010240
- Gross, J. J. (1998). The emerging field of emotion regulation: An integrative review. *Review of General Psychology*, 2(3), 271-299. doi: 10.1037/1089-2680.2.3.271

- Güerker, O., Irlenbusch, B., & Rockenbach, B. (2006). The competitive advantage of sanctioning institutions. *Science*, 312(5770), 108-111. doi: 10.1126/science.1123633
- Güth, W., Huck, S., & Müller, W. (2001). The relevance of equal splits in ultimatum games. *Games and Economic Behavior*, 37(1), 161-169. doi: 10.1006/game.2000.0829
- Hagen, E. H., & Hammerstein, P. (2006). Game theory and human evolution: A critique of some recent interpretations of experimental games. *Theoretical Population Biology*, 69(3), 339-348. doi: 10.1016/j.tpb.2005.09.005
- Hak, T., Van Rhee, H. J., & Suurmond, R. (2016). How to interpret results of meta-analysis. (Version 1.0). Rotterdam, The Netherlands: Erasmus Rotterdam Institute of Management. Retrieved from www.erim.eur.nl/research-support/meta-essentials/downloads.
- Hamilton, W. D. (1964). The genetical evolution of social behaviour. *Journal of Theoretical Biology*, 7, 1-52. doi: 10.1016/0022-5193(64)90038-4
- Hamman, J. R., Loewenstein, G. F., & Weber, R. A. (2010). Self-interest through delegation: An additional rationale for the principal-agent relationship. *American Economic Review*, 100(4), 1826-1846. doi: 10.1257/aer.100.4.1826
- Hardin, G. (1968). The tragedy of the commons. *Science*, 162(3859), 1243-1248. doi: 10.1126/science.162.3859.1243
- Harinck, F., & De Dreu, C. K. W. (2008). Take a break! or not? The impact of mindsets during breaks on negotiation processes and outcomes. *Journal of Experimental Social Psychology*, 44(2), 397-404. doi: 10.1016/j.jesp.2006.12.009
- Hart, J. W., Bridgett, D. J., & Karau, S. J. (2001). Coworker ability and effort as determinants of individual effort on a collective task. *Group Dynamics: Theory, Research, and Practice*, 5(3), 181-190. doi: 10.1037/1089-2699.5.3.181
- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York, NY: Guilford Press.
- Hedges, L. V., & Vevea, J. L. (1998). Fixed- and random-effects models in meta-analysis. *Psychological Methods*, 3(4), 486-504. doi: 10.1037/1082-989X.3.4.486
- Henrich, J., Ensminger, J., McElreath, R., Barr, A., Barrett, C., Bolyanatz, A., . . . Ziker, J. (2010). Markets, religion, community size, and the evolution of fairness and punishment. *Science*, 327(5972), 1480-1484. doi: 10.1126/science.1182238
- Henrich, J., & Henrich, N. (2007). *Why humans cooperate: A cultural and evolutionary explanation*. New York, NY: Oxford University Press.
- Henrich, J., McElreath, R., Barr, A., Ensminger, J., Barrett, C., Bolyanatz, A., Ziker, J. (2006). Costly punishment across human societies. *Science*, 312(5781), 1767-1770. doi: 10.1126/science.1127333

- Herrmann, B., Thöni, C., & Gächter, S. (2008). Antisocial punishment across societies. *Science*, 319(5868), 1362-1367. doi: 10.1126/science.1153808
- Hobbes, T. (1651/1991). *Leviathan*. Cambridge, UK: Cambridge University Press.
- Hoffman, E., McCabe, K., Shachat, K., & Smith, V. (1994). Preferences, property-rights, and anonymity in bargaining games. *Games and Economic Behavior*, 7(3), 346-380. doi: 10.1006/game.1994.1056
- Holmes, E. A., James, E. L., Coode-Bate, T., & Deeperose, C. (2009). Can playing the computer game "Tetris" reduce the build-up of flashbacks for trauma? A proposal from cognitive science. *PLoS ONE*, 4(1), 1-6. doi: 10.1371/journal.pone.0004153
- Hornsey, M. J., & Imani, A. (2004). Criticizing groups from the inside and the outside: An identity perspective on the intergroup sensitivity effect. *Personality and Social Psychology Bulletin*, 30(3), 365-383. doi: 10.1177/0146167203261295
- Hornsey, M. J., Trembath, M., & Gunthorpe, S. (2004). 'You can criticize because you care': Identity attachment, constructiveness, and the intergroup sensitivity effect. *European Journal of Social Psychology*, 34(5), 499-518. doi: 10.1002/ejsp.212
- Insko, C. A., Pinkley, R. L., Hoyle, R. H., Dalton, B., Hong, G. Y., Slim, R. M., . . . Thibaut, J. (1987). Individual versus group discontinuity: The role intergroup contact. *Journal of Experimental Social Psychology*, 23(3), 250-267. doi: 10.1016/0022-1031(87)90035-7
- Insko, C. A., Schopler, J., Gaertner, L., Wildschut, T., Kozar, R., Pinter, B., . . . Montoya, M. R. (2001). Interindividual-intergroup discontinuity reduction through the anticipation of future interaction. *Journal of Personality and Social Psychology*, 80(1), 95-111. doi: 10.1037/0022-3514.80.1.95
- Jaffe, Y., Shapir, N., & Yinon, Y. (1981). Aggression and its escalation. *Journal of Cross-Cultural Psychology*, 12(1), 21-36. doi: 10.1177/0022022181121002
- Jaffe, Y., & Yinon, Y. (1979). Retaliatory aggression in individuals and groups. *European Journal of Social Psychology*, 9(2), 177-186. doi: 10.1002/ejsp.2420090206
- Janoff-Bulman, R., & Carnes, N. C. (2013). Surveying the moral landscape: Moral motives and group-based moralities. *Personality and Social Psychology Review*, 17(3), 219-236. doi: 10.1177/1088868313480274
- Janoff-Bulman, R., Sheikh, S., & Hepp, S. (2009). Proscriptive versus prescriptive morality: Two faces of moral regulation. *Journal of Personality and Social Psychology*, 96(3), 521-537. doi: 10.1037/a0013779
- Jewell, N. P. (1984). Small-sample bias of point estimators of the odds ratio from matched sets. *Biometrics*, 40(2), 421-435. doi: 10.2307/2531395
- Kahneman, D., Diener, E., & Schwarz, N. (1999). *Well-being: The foundations of hedonic psychology*. New York, NY: Russell Sage Foundation.

- Kameda, T., Tsukasaki, T., Hastie, R., & Berg, N. (2011). Democracy under uncertainty: The wisdom of crowds and the free-rider problem in group decision making. *Psychological Review*, 118(1), 76-96. doi: 10.1037/a0020699
- Kamei, K., Putterman, L., & Tyran, J.-R. (2014). State or nature? Endogenous formal versus informal sanctions in the voluntary provision of public goods. *Experimental Economics*, 18(1), 38-65. doi: 10.1007/s10683-014-9405-0
- Kenrick, D. T., Griskevicius, V., Sundie, J. M., Li, N. P., Li, Y. J., & Neuberg, S. L. (2009). Deep rationality: The evolutionary economics of decision making. *Social Cognition*, 27, 764-785. doi: 10.1521/soco.2009.27.5.764
- Kerr, N. L., Rumble, A. C., Park, E. S., Ouwerkerk, J. W., Parks, C. D., Gallucci, M., & Van Lange, P. A. M. (2009). "How many bad apples does it take to spoil the whole barrel?": Social exclusion and toleration for bad apples. *Journal of Experimental Social Psychology*, 45(4), 603-613. doi: 10.1016/j.jesp.2009.02.017
- Kiyonari, T., & Barclay, P. (2008). Cooperation in social dilemmas: Free riding may be thwarted by second-order reward rather than by punishment. *Journal of Personality and Social Psychology*, 95(4), 826-842. doi: 10.1037/a0011381
- Kogan, N., & Wallach, M. (1967). Group risk taking as a function of members' anxiety and defensiveness levels. *Journal of Personality*, 35(1), 50-63. doi: 10.1111/j.1467-6494.1967.tb01415.x
- Kollock, P. (1998). Social dilemmas: The anatomy of cooperation. *Annual Review of Sociology*, 24, 183-214. doi: 10.1146/annurev.soc.24.1.183
- Komorita, S. S., & Barth, J. M. (1985). Components of reward in social dilemmas. *Journal of Personality and Social Psychology*, 48(2), 364-373. doi: 10.1037//0022-3514.48.2.364
- Komorita, S. S., & Parks, C. D. (1995). Interpersonal relations: Mixed-motive interaction. *Annual Review of Psychology*, 46, 183-207. doi: 10.1146/annurev.ps.46.020195.001151
- Krasnow, M. M., Cosmides, L., Pedersen, E. J., & Tooby, J. (2012). What are punishment and reputation for? *Plos One*, 7(9), e45662. doi: 10.1371/journal.pone.0045662
- Krasnow, M. M., Delton, A. W., Cosmides, L., & Tooby, J. (2015). Group cooperation without group selection: Modest punishment can recruit much cooperation. *Plos One*, 10(4), e0124561. doi: 10.1371/journal.pone.0124561
- Krasnow, M. M., Delton, A. W., Cosmides, L., & Tooby, J. (2016). Looking under the hood of third-party punishment reveals design for personal benefit. *Psychological Science*, 27(3), 405-418. doi: 10.1177/0956797615624469
- Krasnow, M. M., Delton, A. W., Tooby, J., & Cosmides, L. (2013). Meeting now suggests we will meet again: Implications for debates on the evolution of cooperation. *Scientific Reports*, 3, 1747. doi: 10.1038/srep01747

- Kurzban, R., DeScioli, P., & O'Brien, E. (2007). Audience effects on moralistic punishment. *Evolution and Human Behavior*, 28(2), 75-84. doi: 10.1016/j.evolhumbehav.2006.06.001
- Langer, E. J. (1975). The illusion of control. *Journal of Personality and Social Psychology*, 32(2), 311-328. doi: 10.1037/0022-3514.32.2.311
- Latané, B., & Darley, J. M. (1968). Group inhibition of bystander intervention in emergencies. *Journal of Personality and Social Psychology*, 10(3), 215-221. doi: 10.1037/h0026570
- Latané, B., & Nida, S. (1981). Ten years of research on group size and helping. *Psychological Bulletin*, 89(2), 308-324. doi: 10.1037/0033-2909.89.2.308
- Le Bon, G. (1903). *The Crowd: A study of the popular mind*. London, UK: Unwin. doi: 10.1037/10878-000
- Leknes, S., & Tracey, L. (2008). A common neurobiology for pain and pleasure. *Nature Reviews Neuroscience*, 9(4), 314-320. doi: 10.1038/nrn2333
- Leliveld, M. C., Van Dijk, E., & Van Beest, I. (2012). Punishing and compensating others at your own expense: The role of empathic concern on reactions to distributive injustice. *European Journal of Social Psychology*, 42(2), 135-140. doi: 10.1002/ejsp.872
- Lerner, J. S., Goldberg, J. H., & Tetlock, P. E. (1998). Sober second thought: The effects of accountability, anger, and authoritarianism on attributions of responsibility. *Personality and Social Psychology Bulletin*, 24(6), 563-574. doi: 10.1177/0146167298246001
- Lerner, J. S., & Tetlock, P. E. (1999). Accounting for the effects of accountability. *Psychological Bulletin*, 125(2), 255-275. doi: 10.1037/0033-2909.125.2.255
- Lewin, K. (1951). *Field theory in social science*. New York, NY: Harper & Row.
- Li, P., Jia, S., Feng, T., Liu, Q., Suo, T., & Li, H. (2010). The influence of the diffusion of responsibility effect on outcome evaluations: Electrophysiological evidence from an ERP study. *Neuroimage*, 52(4), 1727-1733. doi: 10.1016/j.neuroimage.2010.04.275
- Loewenstein, G. F. (1996). Out of control: Visceral influences on behavior. *Organizational Behavior and Human Decision Processes*, 65(3), 272-292. doi: 10.1006/obhd.1996.0028
- Loewenstein, G. F., & Lerner, J. S. (2003). The role of affect in decision making. In R. J. Davidson, K. R. Scherer & H. H. Goldsmith (Eds.), *Handbook of affective sciences* (pp. 619-642). Oxford, UK: Oxford University Press.
- Loewenstein, G. F., & Schkade, D. (1999). Wouldn't it be nice? Predicting future feelings. In D. Kahneman & E. Diener (Eds.), *Well-being: The foundations of hedonic psychology* (pp. 85-105). New York, NY: Russell Sage Foundation.
- Lynn, M., & Oldenquist, A. (1986). Egoistic and nonegoistic motives in social dilemmas. *American Psychologist*, 41(5), 529-534. doi: 10.1037/0003-066X.41.5.529

- MacKinnon, D. P., Fairchild, A. J., & Fritz, M. S. (2007). Mediation analysis. *Annual Review of Psychology*, 58, 593-614. doi: 10.1146/annurev.psych.58.110405.085542
- March, J. G. (1994). *A primer of decision making: How decisions happen*. New York, NY: Free Press.
- Markussen, T., Putterman, L., & Tyran, J. R. (2014). Self-organization for collective action: An experimental study of voting on sanction regimes. *Review of Economic Studies*, 81(1), 301-324. doi: 10.1093/restud/rdt022
- Mathes, E. W., & Kahn, A. (1975). Diffusion of responsibility and extreme behavior. *Journal of Personality and Social Psychology*, 31(5), 881-886. doi: 10.1037/h0076695
- McCallum, D. M., Harring, K., Gilmore, R., Drenan, S., Chase, J. P., Insko, C. A., & Thibaut, J. (1985). Competition and cooperation between groups and between individuals. *Journal of Experimental Social Psychology*, 21(4), 301-320. doi: 10.1016/0022-1031(85)90032-0
- McCusker, C., & Carnevale, P. J. (1995). Framing in resource dilemmas - Loss aversion and the moderating effects of sanctions. *Organizational Behavior and Human Decision Processes*, 61(2), 190-201. doi: 10.1006/obhd.1995.1015
- McGregor, H. A., Lieberman, J. D., Greenberg, J., Solomon, S., Arndt, J., Simon, L., & Pyszczynski, T. (1998). Terror management and aggression: Evidence that mortality salience motivates aggression against worldview-threatening others. *Journal of Personality and Social Psychology*, 74(3), 590-605. doi: 10.1037//0022-3514.74.3.590
- Meier, B. P., & Hinsz, V. B. (2004). A comparison of human aggression committed by groups and individuals: An interindividual-intergroup discontinuity. *Journal of Experimental Social Psychology*, 40(4), 551-559. doi: 10.1016/j.jesp.2003.11.002
- Messé, L. A., & Sivacek, J. M. (1979). Predictions of others' responses in a mixed-motive game: Self-justification or false consensus? *Journal of Personality and Social Psychology*, 37(4), 602-607. doi: 10.1037/0022-3514.37.4.602
- Messick, D. M. (1999). Alternative logics for decision making in social settings. *Journal of Economic Behavior & Organization*, 39(1), 11-28. doi: 10.1016/s0167-2681(99)00023-2
- Messick, D. M., & Brewer, M. B. (1983). Solving social dilemmas: A review. *Review of personality and social psychology*, 4, 11-44.
- Miceli, M., & Castelfranchi, C. (2015). *Expectancy and Emotion*. Oxford, UK: Oxford University Press.
- Milgram, S. (1974). *Obedience to authority: An experimental view*. New York, NY: Harper & Row.
- Milgram, S., & Toch, H. (1969). Collective behavior: Crowds and social motivations. In G. Lindzey & E. Aronson (Eds.), *The Handbook of Social Psychology* (Vol. 4). Reading, MA: Addison-Wesley.

- Milinski, M., Semmann, D., & Krambeck, H. J. (2002). Reputation helps solve the 'tragedy of the commons'. *Nature*, 415(6870), 424-426. doi: 10.1038/415424a
- Miller, D. T. (1999). The norm of self-interest. *American Psychologist*, 54(12), 1053-1060. doi: 10.1037/0003-066X.54.12.1053
- Miller, D. T., & Effron, D. A. (2010). Psychological license: When it is needed and how it functions. In M. P. Zanna & J. M. Olson (Eds.), *Advances in experimental social psychology*. San Diego, CA: Academic Press/Elsevier. doi: 10.1016/S0065-2601(10)43003-8
- Miller, D. T., Effron, D. A., & Zak, S. V. (2009). From moral outrage to social protest: The role of psychological standing. In D. R. Bobocel, A. C. Kay, M. P. Zanna & J. M. Olson (Eds.), *The psychology of justice and legitimacy*. (Vol. 11, pp. 103-123). New York, NY: Psychology Press.
- Miller, D. T., & Ratner, R. K. (1996). The power of the myth of self-interest. In L. Montada & M. J. Lerner (Eds.), *Current societal concerns about justice*. New York, NY: Plenum Press. doi: 10.1007/978-1-4757-9927-9_3
- Miller, D. T., & Ratner, R. K. (1998). The disparity between the actual and assumed power of self-interest. *Journal of Personality and Social Psychology*, 74(1), 53-62. doi: 10.1037/0022-3514.74.1.53
- Molenmaker, W. E., De Kwaadsteniet, E. W., & Van Dijk, E. (2014). On the willingness to costly reward cooperation and punish non-cooperation: The moderating role of type of social dilemma. *Organizational Behavior and Human Decision Processes*, 125(2), 175-183. doi: 10.1016/j.obhdp.2014.09.005
- Molenmaker, W. E., De Kwaadsteniet, E. W., & Van Dijk, E. (2016). The impact of personal responsibility on the (un)willingness to punish non-cooperation and reward cooperation. *Organizational Behavior and Human Decision Processes*, 134, 1-15. doi: 10.1016/j.obhdp.2016.02.004
- Molenmaker, W. E., De Kwaadsteniet, E. W., & Van Dijk, E. (2016). The willingness to costly reward cooperation and punish non-cooperation before versus after the choice behavior: Sanctioning the past, the present or the future. *Manuscript under review*.
- Molm, L. D. (1997). Risk and power use: Constraints on the use of coercion in exchange. *American Sociological Review*, 62(1), 113-133. doi: 10.2307/2657455
- Mooijman, M., Van Dijk, W. W., Ellemers, N., & Van Dijk, E. (2015). Why leaders punish: A power perspective. *Journal of Personality and Social Psychology*, 109(1), 75-89. doi: 10.1037/pspi0000021
- Muehlbacher, S., & Kirchler, E. (2009). Origin of endowments in public good games: The impact of effort on contributions. *Journal of Neuroscience, Psychology, and Economics*, 2(1), 59-67.

- Mulcahy, N. J., & Call, J. (2006). Apes save tools for future use. *Science*, 312(5776), 1038-1040. doi: 10.1126/science.1125456
- Mulder, L. B., Van Dijk, E., & De Cremer, D. (2009). When sanctions that can be evaded still work: The role of trust in leaders. *Social Influence*, 4(2), 122-137. doi: 10.1080/15534510802469156
- Mulder, L. B., Van Dijk, E., De Cremer, D., & Wilke, H. A. M. (2006a). Undermining trust and cooperation: The paradox of sanctioning systems in social dilemmas. *Journal of Experimental Social Psychology*, 42(2), 147-162. doi: 10.1016/j.jesp.2005.03.002
- Mulder, L. B., Van Dijk, E., De Cremer, D., & Wilke, H. A. M. (2006b). When sanctions fail to increase cooperation in social dilemmas: Considering the presence of an alternative option to defect. *Personality and Social Psychology Bulletin*, 32(10), 1312-1324. doi: 10.1177/0146167206289978
- Mulder, L. B., Van Dijk, E., Wilke, H. A. M., & De Cremer, D. (2005). The effect of feedback on support for a sanctioning system in a social dilemma: The difference between installing and maintaining the sanction. *Journal of Economic Psychology*, 26(3), 443-458. doi: 10.1016/j.joep.2004.12.007
- Muller, L., Sefton, M., Steinberg, R., & Vesterlund, L. (2008). Strategic behavior and learning in repeated voluntary contribution experiments. *Journal of Economic Behavior & Organization*, 67(3-4), 782-793. doi: 10.1016/j.jebo.2007.09.001
- Mynatt, C., & Sherman, S. J. (1975). Responsibility attribution in groups and individuals: A direct test of the diffusion of responsibility hypothesis. *Journal of Personality and Social Psychology*, 32(6), 1111-1118. doi: 10.1037/0022-3514.32.6.1111
- Nash, J. F. (1950). Equilibrium points in N-person games. *Proceedings of the National Academy of Sciences of the United States of America*, 36(1), 48-49. doi: 10.1073/pnas.36.1.48
- Nelissen, R. M. A., & Zeelenberg, M. (2009). Moral emotions as determinants of third-party punishment: Anger, guilt, and the functions of altruistic sanctions. *Judgment and Decision Making*, 4(7), 543-553.
- Nemes, S., Jonasson, J. M., Genell, A., & Steineck, G. (2009). Bias in odds ratios by logistic regression modelling and sample size. *Bmc Medical Research Methodology*, 9, 5. doi: 10.1186/1471-2288-9-56
- Nikiforakis, N. (2008). Punishment and counter-punishment in public good games: Can we really govern ourselves? *Journal of Public Economics*, 92(1-2), 91-112. doi: 10.1016/j.jpubeco.2007.04.008
- Nowak, M. A., & Sigmund, K. (1998). Evolution of indirect reciprocity by image scoring. *Nature*, 393(6685), 573-577. doi: 10.1038/31225

- O'Reilly, C. A., & Puffer, S. M. (1989). The impact of rewards and punishments in social context: A laboratory and field experiment. *Journal of Occupational Psychology*, 62(1), 41-53. doi: 10.1111/j.2044-8325.1989.tb00476.x
- Offerman, T. (2002). Hurting hurts more than helping helps. *European Economic Review*, 46(8), 1423-1437. doi: 10.1016/s0014-2921(01)00176-3
- Oliver, P. (1980). Rewards and punishments as selective incentives for collective action: Theoretical investigations. *Journal of Sociology*, 85(6), 1356-1375. doi: 10.1086/227168
- Olson, M. (1965). *The logic of collective action: Public goods and the theory of groups*. Cambridge, MA: Harvard University Press.
- Ostrom, E. (1990). *Governing the commons: The evolution of institutions for collective action*. Cambridge, UK: Cambridge University Press. doi: 10.1017/CBO9780511807763
- Ostrom, E., Burger, J., Field, C. B., Norgaard, R. B., & Policansky, D. (1999). Sustainability - Revisiting the commons: Local lessons, global challenges. *Science*, 284(5412), 278-282. doi: 10.1126/science.284.5412.278
- Ostrom, E., Walker, J., & Gardner, R. (1992). Coverants with and without a sword: Self-governance is possible. *American Political Science Review*, 86(2), 404-417. doi: 10.2307/1964229
- Oxoby, R. J., & McLeish, K. N. (2004). Sequential decision and strategy vector methods in ultimatum bargaining: Evidence on the strength of other-regarding behavior. *Economics Letters*, 84(3), 399-405. doi: 10.1016/j.econlet.2004.03.011
- Oxoby, R. J., & Spraggon, J. (2008). Mine and yours: Property rights in dictator games. *Journal of Economic Behavior & Organization*, 65(3-4), 703-713.
- Parks, C. D., Joireman, J., & Van Lange, P. A. M. (2013). Cooperation, trust, and antagonism: How public goods are promoted. *Psychological Science in the Public Interest*, 14(3), 119-165. doi: 10.1177/1529100612474436
- Parks, C. D., & Stone, A. B. (2010). The desire to expel unselfish members from the group. *Journal of Personality and Social Psychology*, 99(2), 303-310. doi: 10.1037/a0018403
- Pennington, J., & Schlenker, B. R. (1999). Accountability for consequential decisions: Justifying ethical judgments to audiences. *Personality and Social Psychology Bulletin*, 25(9), 1067-1081. doi: 10.1177/01461672992512001
- Piazza, J., & Bering, J. M. (2008). The effects of perceived anonymity on altruistic punishment. *Evolutionary Psychology*, 6(3), 487-501. doi: 10.1177/147470490800600314
- Pillutla, M. M., & Murnighan, J. K. (1996). Unfairness, anger, and spite: Emotional rejections of ultimatum offers. *Organizational Behavior and Human Decision Processes*, 68(3), 208-224. doi: 10.1006/obhd.1996.0100
- Poundstone, W. (1992). *Prisoner's Dilemma*. New York, NY: Oxford University Press.

- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40(3), 879-891. doi: 10.3758/BRM.40.3.879
- Pruitt, D. G., & Kimmel, M. J. (1977). Twenty years of experimental gaming: Critique, synthesis, and suggestions for the future. *Annual Review of Psychology*, 28, 363-392. doi: 10.1146/annurev.ps.28.020177.002051
- Putterman, L. (2014). When punishment supports cooperation: Insights from voluntary contribution experiments. In P. A. M. Van Lange, B. Rockenbach & T. Yamagishi (Eds.), *Reward and punishment in social dilemmas* (pp. 17-33). New York, NY: Oxford University Press. doi: 10.1093/acprof:oso/9780199300730.003.0002
- Putterman, L., Tyran, J. R., & Kamei, K. (2011). Public goods and voting on formal sanction schemes. *Journal of Public Economics*, 95(9-10), 1213-1222. doi: 10.1016/j.jpubeco.2011.05.001
- Quattrone, G. A., & Tversky, A. (1984). Casual versus diagnostic contingencies: On self-deception and on the voter's illusion. *Journal of Personality and Social Psychology*, 46(2), 237-248. doi: 10.1037/0022-3514.46.2.237
- Rand, D. G., Armao, J. J., Nakamaru, M., & Ohtsuki, H. (2010). Anti-social punishment can prevent the co-evolution of punishment and cooperation. *Journal of Theoretical Biology*, 265(4), 624-632. doi: 10.1016/j.jtbi.2010.06.010
- Rand, D. G., Dreber, A., Ellingsen, T., Fudenberg, D., & Nowak, M. A. (2009). Positive interactions promote public cooperation. *Science*, 325(5945), 1272-1275. doi: 10.1126/science.1177418
- Rand, D. G., & Nowak, M. A. (2011). The evolution of antisocial punishment in optional public goods games. *Nature Communications*, 2, 7. doi: 10.1038/ncomms1442
- Rapoport, A., & Au, W. T. (2001). Bonus and penalty in common pool resource dilemmas under uncertainty. *Organizational Behavior and Human Decision Processes*, 85(1), 135-165. doi: 10.1006/obhd.2000.2935
- Ratner, R. K., & Miller, D. T. (2001). The norm of self-interest and its effects on social action. *Journal of Personality and Social Psychology*, 81(1), 5. doi: 10.1037/0022-3514.81.1.5
- Ray, R. D., Wilhelm, F. H., & Gross, J. J. (2008). All in the mind's eye? Anger rumination and reappraisal. *Journal of Personality and Social Psychology*, 94(1), 133-145. doi: 10.1037/0022-3514.94.1.133
- Reuben, E., & Suetens, S. (2012). Revisiting strategic versus non-strategic cooperation. *Experimental Economics*, 15(1), 24-43. doi: 10.1007/s10683-011-9286-4
- Ritov, I., & Baron, J. (1990). Reluctance to vaccinate: Omission bias and ambiguity. *Journal of Behavioral Decision Making*, 3(4), 263-277. doi: 10.1002/bdm.3960030404

- Ritov, I., & Baron, J. (1992). Status-quo and omission biases. *Journal of Risk and Uncertainty*, 5(1), 49-61. doi: 10.1007/BF00208786
- Rockenbach, B., & Milinski, M. (2011). To qualify as a social partner, humans hide severe punishment, although their observed cooperativeness is decisive. *Proceedings of the National Academy of Sciences of the United States of America*, 108(45), 1-6. doi: 10.1073/pnas.1108996108
- Ross, L., & Nisbett, R. E. (1991). *The person and the situation: Perspectives of social psychology*. New York, NY: McGraw-Hill.
- Rotemberg, J. J. (2008). Minimally acceptable altruism and the ultimatum game. *Journal of Economic Behavior & Organization*, 66(3-4), 457-476. doi: 10.1016/j.jebo.2006.06.008
- Royzman, E. B., & Baron, J. (2002). The preference for indirect harm. *Social Justice Research*, 15(2), 165-184. doi: 10.1023/A:1019923923537
- Rutte, C. G., & Wilke, H. A. M. (1984). Social dilemmas and leadership. *European Journal of Social Psychology*, 14(1), 105-121. doi: 10.1002/ejsp.2420140109
- Rutte, C. G., Wilke, H. A. M., & Messick, D. M. (1987). Scarcity or abundance caused by people or the environment as determinants of behavior in the resource dilemma. *Journal of Experimental Social Psychology*, 23(3), 208-216. doi: 10.1016/0022-1031(87)90032-1
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68-78.
- Samuelson, P. A. (1954). The pure theory of public expenditure. *The Review of Economics and Statistics*, 36(4), 387-289. doi: 10.2307/1925895
- Sanfey, A. G., Rilling, J. K., Aronson, J. A., Nystrom, L. E., & Cohen, J. D. (2003). The neural basis of economic decision-making in the ultimatum game. *Science*, 300(5626), 1755-1758. doi: 10.1126/science.1082976
- Schlenker, B. R. (1986). Self-identification: Toward an integration of the private and public self. In R. F. Baumeister (Ed.), *Public self and private self* (pp. 21-62). New York, NY: Springer. doi: 10.1007/978-1-4613-9564-5_2
- Schlenker, B. R., Britt, T. W., Pennington, J., Murphy, R., & Doherty, K. (1994). The triangle model of responsibility. *Psychological Review*, 101(4), 632-652. doi: 10.1037/0033-295X.101.4.632
- Schlenker, B. R., Weigold, M. F., & Doherty, K. (1991). Coping with accountability: Self-identification and evaluative reckonings. In C. R. Snyder & D. R. Forsyth (Eds.), *Handbook of social and clinical psychology: The health perspective* (pp. 96-115). Elmsford, NY: Pergamon Press.
- Schopler, J., Insko, C. A., Drigotas, S. M., Wieselquist, J., Pemberton, M. B., & Cox, C. (1995). The role of identifiability in the reduction of interindividual intergroup discontinuity. *Journal of Experimental Social Psychology*, 31(6), 553-574. doi: 10.1006/jesp.1995.1025

- Schroeder, D. A., Steel, J. E., Woodell, A. J., & Bembenek, A. F. (2003). Justice within social dilemmas. *Personality and Social Psychology Review*, 7(4), 374-387. doi: 10.1207/s15327957pspr0704_09
- Scott, M. B., & Lyman, S. M. (1968). Accounts. *American Sociological Review*, 33(2), 46-62. doi: 10.2307/2092239
- Sefton, M., Shupp, R., & Walker, J. M. (2007). The effect of rewards and sanctions in provision of public goods. *Economic Inquiry*, 45(4), 671-690. doi: 10.1111/j.1465-7295.2007.00051.x
- Seip, E. C., Van Dijk, W. W., & Rotteveel, M. (2009). On hotheads and dirty harries: The primacy of anger in altruistic punishment. *Annals of the New York Academy of Sciences*, 1167, 190-196. doi: 10.1111/j.1749-6632.2009.04503.x
- Seip, E. C., Van Dijk, W. W., & Rotteveel, M. (2014). Anger motivates costly punishment of unfair behavior. *Motivation and Emotion*, 38(4), 578-588. doi: 10.1007/s11031-014-9395-4
- Selten, R. (1967). Die strategiemethode zur erforschung des eingeschränkt rationalen verhaltens in rahmen eines oligopolexperiments. In H. Sauer mann (Ed.), *Beiträge zur experimentellen Wirtschaftsforschung* (pp. 136-168). Tübingen, GR: Mohr.
- Semin, G. R., & Manstead, A. S. R. (1983). *The accountability of conduct: A social psychological analysis*. New York, NY: Academic Press.
- Shafir, E. (1994). Uncertainty and the difficulty of thinking through disjunctions. *Cognition*, 50(1-3), 403-430. doi: 10.1016/0010-0277(94)90038-8
- Shafir, E., Simonson, I., & Tversky, A. (1993). Reason-based choice. *Cognition*, 49(1), 11-36. doi: 10.1016/0010-0277(93)90034-S
- Shafir, E., & Tversky, A. (1992). Thinking through uncertainty: Nonconsequential reasoning and choice. *Cognitive Psychology*, 24(4), 449-474. doi: 10.1016/0010-0285(92)90015-T
- Shaver, K. G. (1975). *An introduction to attribution processes*. Cambridge, MA: Winthrop.
- Shaver, K. G. (1985). *The attribution of blame*. New York, NY: Springer-Verlag. doi: 10.1007/978-1-4612-5094-4
- Sherif, M., Harvey, O. J., White, J., Hood, W., & Sherif, C. W. (1961). *Intergroup conflict and cooperation: The robber's cave experiment*. Norman, OK: Institute of Intergroup Relations.
- Shinada, M., & Yamagishi, T. (2007). Bringing back Leviathan in social dilemmas. In A. Biel, D. Eek, T. Gärling & M. Gustafsson (Eds.), *New issues and paradigms in research on social dilemmas* (pp. 93-123). New York, NY: Springer.
- Sivanathan, N., Molden, D. C., Galinsky, A. D., & Ku, G. (2008). The promise and peril of self-affirmation in de-escalation of commitment. *Organizational Behavior and Human Decision Processes*, 107(1), 1-14. doi: 10.1016/j.obhdp.2007.12.004

- Skinner, E. A. (1996). A guide to constructs of control. *Journal of Personality and Social Psychology*, 71(3), 549. doi: 10.1037/0022-3514.71.3.549
- Small, D. A., & Loewenstein, G. F. (2003). Helping a victim or helping the victim: Altruism and identifiability. *Journal of Risk and Uncertainty*, 26(1), 5-16. doi: 10.1023/a:1022299422219
- Small, D. A., & Loewenstein, G. F. (2005). The devil you know: The effects of identifiability on punishment. *Journal of Behavioral Decision Making*, 18(5), 311-318. doi: 10.1002/bdm.507
- Spranca, M., Minsk, E., & Baron, J. (1991). Omission and commission in judgment and choice. *Journal of Experimental Social Psychology*, 27(1), 76-105. doi: 10.1016/0022-1031(91)90011-T
- Strimling, P., & Eriksson, K. (2014). Regulating the regulation: Norms about punishment. In P. A. M. Van Lange, B. Rockenbach & T. Yamagishi (Eds.), *Reward and punishment in social dilemmas* (pp. 52-67). New York, NY: Oxford University Press. doi: 10.1093/acprof:oso/9780199300730.001.0001
- Sutter, M., Haiguer, S., & Kocher, M. G. (2010). Choosing the carrot or the stick? Endogenous institutional choice in social dilemma situations. *Review of Economic Studies*, 77(4), 1540-1566. doi: 10.1111/j.1467-937X.2010.00608.x
- Sylwester, K., Herrmann, B., & Bryson, J. J. (2013). Homo homini lupus? Explaining antisocial punishment. *Journal of Neuroscience, Psychology, and Economics*, 6(3), 167-188. doi: 10.1037/npe0000009
- Taylor, M. (1982). *Community, anarchy and liberty*. Cambridge, UK: Cambridge University Press. doi: 10.1017/CBO9780511607875
- Tenbrunsel, A. E., & Messick, D. M. (1999). Sanctioning systems, decision frames, and cooperation. *Administrative Science Quarterly*, 44(4), 684-707. doi: 10.2307/2667052
- Tetlock, P. E. (1992). The impact of accountability on judgment and choice: Toward a social contingency model. *Advances in Experimental Social Psychology*, 25(3), 331-376. doi: 10.1016/S0065-2601(08)60287-7
- Thibaut, J. W., & Kelley, H. H. (1959). *The social psychology of groups*. Oxford, UK: John Wiley.
- Tinbergen, N. (1968). On war and peace in animals and man. *Science*, 160(3835), 1411-1418. doi: 10.1126/science.160.3835.1411
- Todd, P. M., & Gigerenzer, G. (2007). Environments that make us smart: Ecological rationality. *Current Directions in Psychological Science*, 16, 167-171. doi: 10.1111/j.1467-8721.2007.00497.x
- Tooby, J., & Cosmides, L. (1992). The psychology foundations of culture. In J. H. Barkow, L. Cosmides & J. Tooby (Eds.), *The adapted mind: Evolutionary psychology and the generation of culture* (pp. 19-136). New York, NY: Oxford University Press.
- Trevino, L. K. (1992). The social effects of punishment in organizations: A justice perspective. *Academy of Management Review*, 17(4), 647-676. doi: 10.2307/258803

- Tricomi, E., Rangel, A., Camerer, C. F., & O'Doherty, J. P. (2010). Neural evidence for inequality-averse social preferences. *Nature*, *463*(7284), 1089-U1109. doi: 10.1038/nature08785
- Trivers, R. L. (1971). Evolution of reciprocal altruism. *Quarterly Review of Biology*, *46*(1), 35-57. doi: 10.1086/406755
- Tversky, A., & Shafir, E. (1992). The disjunction effect in choice under uncertainty. *Psychological Science*, *3*(5), 305-309. doi: 10.1111/j.1467-9280.1992.tb00678.x
- Van't Wout, M., Kahn, R. S., Sanfey, A. G., & Aleman, A. (2006). Affective state and decision-making in the ultimatum game. *Experimental Brain Research*, *169*(4), 564-568. doi: 10.1007/s00221-006-0346-5
- Van Beest, I., Carter-Sowell, A. R., Van Dijk, E., & Williams, K. D. (2012). Groups being ostracized by groups: Is the pain shared, is recovery quicker, and are groups more likely to be aggressive? *Group Dynamics-Theory Research and Practice*, *16*(4), 241-254. doi: 10.1037/a0030104
- Van Beest, I., Van Dijk, E., De Dreu, C. K. W., & Wilke, H. A. M. (2005). Do-no-harm in coalition formation: Why losses inhibit exclusion and promote fairness cognitions. *Journal of Experimental Social Psychology*, *41*(6), 609-617. doi: 10.1016/j.jesp.2005.01.002
- Van Dijk, E., De Kwaadsteniet, E. W., & Mulder, L. B. (2009). *How certain do we need to be to punish and reward in social dilemmas?* Paper presented at the 13th international conference on social dilemmas, Kyoto, Japan.
- Van Dijk, E., Molenmaker, W. E., & De Kwaadsteniet, E. W. (2015). Promoting cooperation in social dilemmas: The use of sanctions. *Current Opinion in Psychology*, *6*, 118-122. doi: 10.1016/j.copsyc.2015.07.006
- Van Dijk, E., & Wilke, H. A. M. (1995). Coordination rules in asymmetric social dilemmas - A comparison between public good dilemmas and resource dilemmas. *Journal of Experimental Social Psychology*, *31*(1), 1-27. doi: 10.1006/jesp.1995.1001
- Van Dijk, E., & Wilke, H. A. M. (1997). Is it mine or is it ours? Framing property rights and decision making in social dilemmas. *Organizational Behavior and Human Decision Processes*, *71*(2), 195-209. doi: 10.1006/obhd.1997.2718
- Van Dijk, E., & Wilke, H. A. M. (2000). Decision-induced focusing in social dilemmas: Give-some, keep-some, take-some, and leave-some dilemmas. *Journal of Personality and Social Psychology*, *78*(1), 92-104. doi: 10.1037//0022-3514.78.1.92
- Van Dijk, E., Wilke, H. A. M., & Wit, A. P. (2003). Preferences for leadership in social dilemmas: Public good dilemmas versus common resource dilemmas. *Journal of Experimental Social Psychology*, *39*(2), 170-176. doi: 10.1016/s0022-1031(02)00518-8
- Van Dijk, E., Wit, A. P., Wilke, H. A. M., & Budescu, D. V. (2004). What we know (and do not know) about the effects of uncertainty on behavior in social dilemmas. In R. Suleiman, D. V. Budescu, I. Fischer & D. M. Messick (Eds.), *Contemporary psychological research on social dilemmas* (pp. 315-331). New York, NY: Cambridge University Press.

- Van Dijk, E., & Zeelenberg, M. (2003). The discounting of ambiguous information in economic decision making. *Journal of Behavioral Decision Making*, 16, 341-352. doi: 10.1002/bdm.450
- Van Dijk, E., & Zeelenberg, M. (2006). The dampening effect of uncertainty on positive and negative emotions. *Journal of Behavioral Decision Making*, 19, 171-176. doi: 10.1002/bdm.504
- Van Dillen, L. F., Van der Wal, R. C., & Van den Bos, K. (2012). On the role of attention and emotion in morality: Attentional control modulates unrelated disgust in moral judgments. *Personality and Social Psychology Bulletin*, 38(9), 1222-1231. doi: 10.1177/0146167212448485
- Van Lange, P. A. M., De Cremer, D., Van Dijk, E., & Van Vugt, M. (2007). Self-interest and beyond: Basic principles of social interaction. In A. W. Kruglanski & E. T. Higgins (Eds.), *Social psychology: Handbook of basic principles* (2 ed., pp. 540-561). New York, NY: Guilford Press.
- Van Lange, P. A. M., Joireman, J. A., Parks, C. D., & Van Dijk, E. (2013). The psychology of social dilemmas: A review. *Organizational Behavior and Human Decision Processes*, 120(2), 125-141. doi: 10.1016/j.obhdp.2012.11.003
- Van Lange, P. A. M., Ouwerkerk, J. W., & Tazelaar, M. J. A. (2002). How to overcome the detrimental effects of noise in social interaction: The benefits of generosity. *Journal of Personality and Social Psychology*, 82(5), 768-780. doi: 10.1037//0022-3514.82.5.768
- Van Lange, P. A. M., Rockenbach, B., & Yamagishi, T. (2014). *Reward and punishment in social dilemmas*. New York, NY: Oxford University Press. doi: 10.1093/acprof:oso/9780199300730.001.0001
- Van Rhee, H. J., Suurmond, R., & Hak, T. (2015). User manual for Meta-Essentials: Workbooks for meta-analysis. (Version 1). Rotterdam, The Netherlands: Erasmus Research Institute of Management. Retrieved from www.irim.eur.nl/research-support/meta-essentials.
- Von Neumann, J., & Morgenstern, O. (1944). *Theory of games and economic behavior*. Princeton, NJ: Princeton University Press.
- Walker, J. M., & Halloran, M. A. (2004). Rewards and sanctions and the provision of public goods in one-shot settings. *Experimental Economics*, 7(3), 235-247. doi: 10.1023/b:exec.0000040559.08652.51
- Wallach, M. A., & Kogan, N. (1965). The roles of information, discussion, and consensus in group risk taking. *Journal of Experimental Social Psychology*, 1(1), 1-19. doi: 10.1016/0022-1031(65)90034-X
- Wallach, M. A., Kogan, N., & Bem, D. J. (1962). Group influence on individual risk taking. *The Journal of Abnormal and Social Psychology*, 65(2), 75-86. doi: 10.1037/h0044376
- Wallach, M. A., Kogan, N., & Bem, D. J. (1964). Diffusion of responsibility and level of risk taking in groups. *The Journal of Abnormal and Social Psychology*, 68(3), 263-274. doi: 10.1037/h0042190

- Wang, C. S., Galinsky, A. D., & Murnighan, J. K. (2009). Bad drives psychological reactions, but good propels behavior: Responses to honesty and deception. *Psychological Science*, 20(5), 634-644. doi: 10.1111/j.1467-9280.2009.02344.x
- Wang, C. S., Sivanathan, N., Narayanan, J., Ganegoda, D. B., Bauer, M., Bodenhausen, G. V., & Murnighan, J. K. (2011). Retribution and emotional regulation: The effects of time delay in angry economic interactions. *Organizational Behavior and Human Decision Processes*, 116(1), 46-54. doi: 10.1016/j.obhdp.2011.05.007
- Wang, Z.-J., Li, S., & Jiang, C.-M. (2012). Emotional response in a disjunction condition. *Journal of Economic Psychology*, 33(1), 71-78. doi: 10.1016/j.joep.2011.08.009
- Weber, J. M., Kopelman, S., & Messick, D. M. (2004). A conceptual review of decision making in social dilemmas: Applying a logic of appropriateness. *Personality and Social Psychology Review*, 8(3), 281-307. doi: 10.1207/s15327957pspr0803_4
- Weiss, D. M., & Sachs, J. (1991). Persuasive strategies used by preschool children. *Discourse Processes*, 14(1), 55-72. doi: 10.1080/01638539109544774
- West, S. A., El Mouden, C., & Gardner, A. (2011). Sixteen common misconceptions about the evolution of cooperation in humans. *Evolution and Human Behavior*, 32(4), 231-262. doi: 10.1016/j.evolhumbehav.2010.08.001
- West, S. A., Griffin, A. S., & Gardner, A. (2007). Social semantics: Altruism, cooperation, mutualism, strong reciprocity and group selection. *Journal of Evolutionary Biology*, 20(2), 415-432. doi: 10.1111/j.1420-9101.2006.01258.x
- Wildschut, T., Pinter, B., Vevea, J. L., Insko, C. A., & Schopler, J. (2003). Beyond the group mind: A quantitative review of the interindividual-intergroup discontinuity effect. *Psychological Bulletin*, 129(5), 698-722. doi: 10.1037/0033-2909.129.5.698
- Wilson, D. S. (1975). A theory of group selection. *Proceedings of the National Academy of Sciences of the United States of America*, 72(1), 143-146. doi: 10.1073/pnas.72.1.143
- Wit, A. P., & Wilke, H. A. M. (1990). The presentation of rewards and punishments in a simulated social dilemma. *Social Behaviour*, 5(4), 231-245.
- Wu, J., Balliet, D., & Van Lange, P. A. M. (2016). Gossip versus punishment: The efficiency of reputation to promote and maintain cooperation. *Scientific Reports*, 6, 23919. doi: 10.1038/srep23919
- Yamagishi, T. (1986). The provision of a sanctioning system as a public good. *Journal of Personality and Social Psychology*, 51(1), 110-116. doi: 10.1037/0022-3514.51.1.110
- Yamagishi, T. (1988). The provision of a sanctioning system in the United-States and Japan. *Social Psychology Quarterly*, 51(3), 265-271. doi: 10.2307/2786924
- Zimbardo, P. G. (1969). The human choice: Individuation, reason, and order versus deindividuation, impulse, and chaos. *Nebraska Symposium on Motivation*, 17, 237-307.