Kent Academic Repository

Full text document (pdf)

Citation for published version

Imada, Hirotaka (2020) Preference for Anonymous Giving. Letters on Evolutionary Behavioral Science, 11 (1). pp. 22-26. ISSN 1884-927X.

DOI

Link to record in KAR

https://kar.kent.ac.uk/81968/

Document Version

Author's Accepted Manuscript

Copyright & reuse

Content in the Kent Academic Repository is made available for research purposes. Unless otherwise stated all content is protected by copyright and in the absence of an open licence (eg Creative Commons), permissions for further reuse of content should be sought from the publisher, author or other copyright holder.

Versions of research

The version in the Kent Academic Repository may differ from the final published version.

Users are advised to check http://kar.kent.ac.uk for the status of the paper. Users should always cite the published version of record.

Enquiries

For any further enquiries regarding the licence status of this document, please contact: researchsupport@kent.ac.uk

If you believe this document infringes copyright then please contact the KAR admin team with the take-down information provided at http://kar.kent.ac.uk/contact.html





Accepted manuscript: Imada, H. (2020). Preference for Anonymous giving. *Letters on Evolutionary Behavioral Science*, 11(1), 22-26, doi: https://doi.org/10.5178/lebs.2020.76.

Preference for Anonymous Giving

Hirotaka Imada*

University of Kent

*Author for correspondence (hi67@kent.ac.uk)

short title: Preference for anonymous giving

Abstract

Individuals sometimes prefer to anonymously donate money when they can publicly do so. In other words, they deliberately hide their costly prosocial behavior from a broad audience. While existing research has collated various evolutionary theories emphasizing the value of public prosocial behavior, it has not endeavored to address the preference for anonymous giving. The article discussed potential explanations for the preference and pointed to the importance of further scholarly discussion about the value and function of anonymous prosocial behavior.

Keywords

prosocial behavior, crowdfunding, anonymity, reputation, altruism

Preference for Anonymous Giving

When Donald Trump became the president of the United States in 2017, he pledged to build a wall on the border between the United States and Mexico. In December 2018, an Iraq war veteran launched a crowdfunding campaign, aiming to fund the border wall project. Since then, a number of people have donated, and more than 25 million U.S. dollars have been gathered. It is not surprising since several studies documented the prevalence of charitable giving in various contexts (e.g., Blackbaud, 2015; Engel, 2011; Soetevent, 2005). In fact, the prevalence of such other-regarding behavior has been well explained by various evolutionary theoretical frameworks (for reviews, see Barclay, 2012; Van Vugt et al., 2012; Wu et al., 2016a). In addition, previous studies revealed that individuals direct costly prosocial acts more towards in-group members, compared to out-group members in various contexts (for reviews, see Balliet et al., 2014; De Dreu et al., 2014; Everett et al., 2015). Past research also documented in-group favoritism when contexts were politically charged (e.g., Balliet et al., 2018; Rand et al., 2009). Thus, assuming that donors are mostly conservatives, the previous literature on in-group favoring behavior also explains the success of the crowdfunding project. Crowdfunding platforms are unique in that donors can choose between an anonymous and public donation, and if they choose the former, their name and contribution are only known to beneficiaries; their personal information is hidden from visitors of the platforms and other donors. Behind the success of the crowdfunding project, I witnessed a striking phenomenon; many people chose to make an anonymous donation. Previous studies also documented such behavior; Peacey and Sanders (2013) reported that 12% of 73,584 donations done on behalf of people running in the London Marathon via the Virgin Money Giving website were anonymous. Raihani (2014) found that roughly 5% of 3,945 donations anonymously donated on an online fundraising website. Moreover, Sisco and Weber (2019)

collected records of actual contribution to more than 9000 projects from roughly 558,000 individuals on the GoFundMe. They discovered that 21% of the donation (\$10,247,209) was made anonymously. Despite the variation in the proportion of anonymous donation which could be due to differences in sample sizes, it is evident that a sizeable number of individuals do opt for anonymous giving – Why do they prefer to hide their altruistic acts from a broad audience?

Evolutionary perspectives have prolificated studies concerning why individuals display costly other-benefitting behavior, and they have highlighted the value of public actions, i.e., signals. Evolutionary biologists and psychologists have collated various theories such as indirect reciprocity (Alexander, 1987; Leimar & Hammerstein, 2001; Nowak & Sigmund, 1998, 2005) and the costly signaling theory (Gintis et al., 2001; Zahavi & Zahavi, 1999). While these theories have different focuses, they converge on the idea that costly acts should be public to be beneficial for actors; completely anonymous behavior does not invite indirect reciprocity nor signal anything. In line with the theories, numerous empirical studies demonstrated that prosociality is conditional to various reputational cues (Barclay, 2004; Barclay & Willer, 2007; Beersma & Van Kleef, 2011; Campbell & Slack, 2006; Feinberg et al., 2014; Filiz-Ozbay & Ozbay, 2014; Hardy & Van Vugt, 2006; Milinski et al., 2002; Piazza & Bering, 2008; Semmann et al., 2004; Sylwester & Roberts, 2010, 2013; Van Vugt et al., 2012; Wu et al., 2015, 2016b), indicating that publicity of their behavior increases prosocial behavior. Furthermore, preceding research has also shown that public prosocial behavior, results in receiving a favorable treatment (Barclay, 2004; Sylwester & Roberts, 2010; Wedekind & Milinski, 2000) and signaling positive traits (Barclay, 2006; Barclay & Willer, 2007; Price, 2003; Van Lange & Liebrand, 1991; also see Fehrler & Przepiorka, 2016 that did not earn statistical support), suggesting public altruism has net benefits. Overall, these findings suggest that individuals would normally favor public giving over anonymous giving (Andreoni & Petrie, 2004). Therefore, existing theories, such as indirect reciprocity, do not offer frameworks to understand the preference for anonymous giving.

It is a theoretical conundrum as to why individuals prefer not to have a broad audience know about their donation. Although previous studies explained why individuals anonymously display prosocial behavior (e.g., Hackel et al., 2017), such preference for anonymous giving has not been directly studied. In the following, I discuss potential explanations for the preference and argue that costly anonymous behavior would have its functions and values.

First, the amount of donation relative to other donors should influence the decision as to whether to make donations public or anonymous. Relevant underpinnings for the prediction are derived from competitive altruism (Barclay & Willer, 2007; Glazer & Konrad, 1996; Hardy & Van Vugt, 2006; Roberts, 1998; Van Vugt et al., 2012). The theory provides an explanation for the evolution of cooperation, assuming that there are individual differences in altruism, and there is competition in selecting partners and forming coalitions. According to the theory, individuals should compete to be generous in order to increase mating and coalition opportunities. Experimental studies found support for the theory, demonstrating that public signals of cooperation deliver cooperative intent and trustworthiness (Barclay, 2004; Barclay & Willer, 2007) and those who gave more in a public goods game were more likely to be chosen as a partner (Hardy & Van Vugt, 2006; Sylwester & Roberts, 2010). Furthermore, Kraft-Todd and Rand (2019) found that heroic actions were perceived as rare and costly to actors. Peacey and Sanders (2013) also found that extremely large donations were likely to be anonymous. Given that the race to be altruistic exists, when one knows their contribution would be much smaller than that of other individuals, they would opt out for anonymous contribution; disclosing this would signal unfavorable quality of them relative to others, and consequently, it would disadvantage them in the race. Thus, past research has

suggested that public and enormous contribution would have various net benefits, and individuals whose contribution is known to be relatively small would opt for anonymous giving.

It might seem to suggest that individuals would publicly donate a large amount of money, but previous studies have implied that it is not that simple; observers of such public signals do not always perceive the gesture as conveying generosity, rather they see it as a self-serving strategic act (Berman et al., 2015; Gambetta & Przepiorka, 2014; Hoffman et al., 2015). Moreover, Rand and Epstein (2014) revealed that individuals attributed heroic acts to intuitive decision-making, rather than thoughtful, strategic decision making. Thus, individuals are not only sensitive to the quantity of altruistic behavior but also the motivation behind it. It would be of vital importance in evaluating prosocial acts whether actors themselves choose to make it public or not; when people know that somebody arbitrarily makes their altruistic act public, observers of the action might not positively evaluate it. From the recipient's perspective, it would be particularly important as anonymous donation might partial out the self-serving motives of donors. Consistently with this, Raihani (2014) revealed that donors tended to choose anonymous contributions when making extremely low and high donations. Furthermore, social psychological work has added empirical support for the preference for anonymous giving in a different light. It has found that individuals evaluate others bases on whether their behavior is normative or not (Marques et al., 2001; Parks & Stone, 2010). Parks and Stone. (2010), for example, found that people the least wanted a selfless actor in public goods games to remain in the group. They further conducted a thematic analysis on reasons behind the unpopularity of altruists and revealed that individuals felt that the presence of such selfless persons made them look bad, and the selfless seemed to deviate from the behavioral norm of the group. Their finding has aided the argument that public mass donation might be rather harmful to donors.

Overall, while the competitive altruism perspective generally argues that the more contribution one can publicly make, the more likely it is that they are better off, there has been ample evidence that public signals might backfire. Past research collectively suggested that when the amount of donation deviates from the central tendency towards either the low or high end, a public donation will yield negative consequences.

The second explanation is pertinent to the role of prosocial behavior in signaling the relationship between a recipient and a donor. Bird et al. (2018) suggested that prosocial signals not only form potential coalitions but also maintain existing cooperative relationships with others. They have posited that a subtle dyadic interpersonal signal serves to signal the actors' commitment to the relationship. Given that altruism implicates that actors are willing to commit to the relationship with recipients of their generosity, it can be reasonably assumed that interpersonal prosocial behavior would convey information about the relationship between a recipient and a donor to observers; I contend that public interpersonal prosocial behavior indicates the alliance between the individuals, or, at least, the intension of a donor to form a coalition. This becomes extremely important when individuals do not want to conceal the relationship with the recipient but still would like to contribute.

There is a compelling example that individuals are aware that altruistic acts reveal the relationship and they strategically anonymize it; in January 2020, Massachusetts Institution of Technology released the report that faculty members had been receiving donations from Jeffery Epstein who was convicted of procuring an underage girl for prostitution (Braceras et al., 2020). They knew that the fact they had received money from him would damage their reputation and decided to record it as anonymous purposefully. Aside from this extreme example, the crowdfunding project that I referred to earlier can also be an example. Public contribution to the project unquestionably divulges the political affiliation and commitment of donors, and the reveal might disadvantage them, especially in politically diverse places.

Specifically, the overt connection to the recipient (i.e., the Republican party) would negatively affect how liberals perceive them.

Previous studies have demonstrated that individuals would care how in-group members see them, not out-group members or strangers (Kiyonari et al., 2000; Mifune et al., 2010; Yamagishi et al., 1999), suggesting that conservatives would not think about how liberals would think about them. However, recent studies have collated counter-evidence that they do care about their reputation even when interacting with out-group members (Romano et al., 2017; Yazdi et al., 2020). Moreover, several studies have found that individuals sometimes help out-group members so that the out-group has a positive image of their own group (e.g., Hopkins et al., 2007; van Leeuwen & Jongh, 2015). Thus, past studies suggest that it is important for individuals to maintain a positive reputation from others regardless of their group membership under some circumstances. Therefore, conservatives might opt for anonymous donation, considering how others, especially liberals, would perceive them. Overall, it can be postulated that individuals would avoid public contribution to an agent or a group when the disclosure of the relationship with them might be negatively perceived by others.

I have discussed two likely accounts for the preference for anonymous giving, proposing that anonymous giving could be a means for reputation management. The first explanation, the potential influence of the relative amount of contribution, has already gained preliminary evidence from Raihani (2014) that found that extremely low and high donations were more likely to be anonymous compared to mid-range donations. However, the motivation behind the observed tendency has not been examined yet. Future experimental work should, thus, further investigate how individuals perceive altruism deviating from norms and whether the anonymization of prosocial acts is, in fact, linked to the meta-perception of public altruistic behavior. The second explanation was based on the assumption that public prosocial behavior reveals the coalition between a donor and recipient, and individuals strategically hide it. It is, however, challenging to conduct an experiment in which characteristics of a recipient is manipulated (e.g., a villain vs. a hero), as it is unlikely that individuals would display prosocial behavior towards a person or group with a negative image in the first place. Alternatively, I suggest that future studies focus on whether individuals would like to anonymously or publicly contribute to an in-group, manipulating images of the group (positively vs. negatively perceived in-group; e.g., see Hopkins et al., 2007; Owuamalam & Zagefka, 2011). This would establish a similar context to the crowdfunding project and would allow us to directly test the hypothesis that individuals anonymize prosocial behavior towards an in-group with negative images in order to conceal the affiliation with it. Lastly, I would like to note that there are, of course, other miscellaneous factors potentially underpinning the tendency, such as a default choice (Arshad et al., 2019; Sunstein, 2017) and individual differences in prosocial tendencies (e.g., social value orientation; McClintock & Allison, 1989). Thus, there would be diverse, relevant paths for future studies to elucidate psychological or evolutionary mechanisms behind the tendency to opt-out for anonymous giving.

In conclusion, past studies have not yet endeavored to delineate why individuals sometimes tend to conceal their altruistic acts from the broad audience, and the value and function of such anonymous giving have been understudied. Despite the lack of research, past studies have implied that individuals might deliberately anonymize their prosocial acts from third parties. In other words, they might arbitrarily control the dissemination of information signaled by their behavior – I would call it *selective signaling*. This notion challenges the predominant view that anonymous giving is a pure reflection of selfless intents (psychological altruism; Batson, 1991; Sisco & Weber, 2019). Thus, I believe that future research should further delve into the deliberate anonymization of prosocial behavior. The

elucidation of the preference for anonymous giving would substantially improve the current understanding of anonymous altruistic actions.

References

- Alexander, R. D. (1987). The biology of moral systems. Taylor and Francis. https://doi.org/10.4324/9780203700976
- Andreoni, J., & Petrie, R. (2004). Public goods experiments without confidentiality: a glimpse into fundraising. Journal of Public Economics, 88, 1605-1623. https://doi.org/10.1016/S0047-2727(03)00040-9
- Arshad, A., Anderson, B., & Sharif, A. (2019). Comparison of organ donation and transplantation rates between opt-out and opt-in systems. Kidney International, 95, 1453-1460. https://doi.org/10.1016/j.kint.2019.01.036
- Balliet, D., Tybur, J. M., Wu, J., Antonellis, C., & Van Lange, P. A. M. (2018). Political ideology, trust, and cooperation: in-group favoritism among republicans and democrats during a US national election. Journal of Conflict Resolution, 62, 797-818. https://doi.org/10.1177/0022002716658694
- Balliet, D., Wu, J., & De Dreu, C. K. W. (2014). Ingroup favoritism in cooperation: a meta-analysis. Psychological Bulletin, 140, 1556-1581. https://doi.org/10.1037/a0037737
- Barclay, P. (2004). Trustworthiness and competitive altruism can also solve the "tragedy of the commons." Evolution and Human Behavior, 25, 209-220. https://doi.org/10.1016/j.evolhumbehav.2004.04.002
- Barclay, P. (2006). Reputational benefits for altruistic punishment. Evolution and Human Behavior, 27, 325-344. https://doi.org/10.1016/j.evolhumbehav.2006.01.003
- Barclay, P. (2012). Harnessing the power of reputation: strengths and limits for promoting cooperative behaviors. Evolutionary Psychology, 10, 868-883. https://doi.org/10.1177/147470491201000509
- Barclay, P., & Willer, R. (2007). Partner choice creates competitive altruism in humans. Proceedings of the Royal Society B: Biological Sciences, 274, 749-753. https://doi.org/10.1098/rspb.2006.0209
- Batson, C. D. (1991). The altruism question: toward a social-psychological answer. Lawrence Erlbaum Associates.
- Beersma, B., & Van Kleef, G. A. (2011). How the grapevine keeps you in line: gossip increases contributions to the group. Social Psychological and Personality Science, 2, 642-649. https://doi.org/10.1177/1948550611405073
- Berman, J. Z., Levine, E. E., Barasch, A., & Small, D. A. (2015). The Braggart's dilemma: on the social rewards and penalties of advertising prosocial behavior. Journal of Marketing Research, 52, 90-104. https://doi.org/10.1509/jmr.14.0002
- Bird, R. B., Ready, E., & Power, E. A. (2018). The social significance of subtle signals. Nature Human Behaviour, 2, 452-457. https://doi.org/10.1038/s41562-018-0298-3
- Blackbaud. (2015). Diversity in giving: the changing landscape of american philanthropy. February, 1-16. https://institute.blackbaud.com/asset/diversity-in-giving/
- Braceras, R. M., Chunias, J. L., Goodwin, K. P. M., & Llp, P. (2020). Report concerning jeffrey epstein's interactions with the massachusetts institute of technology. https://facultygovernance.mit.edu/sites/default/files/20200121GoodwinProcterReport.pdf
- Campbell, D., & Slack, R. (2006). Public visibility as a determinant of the rate of corporate charitable donations. Business Ethics: A European Review, 15, 19-28. https://doi.org/10.1111/j.1467-8608.2006.00425.x

- De Dreu, C. K. W., Balliet, D., & Halevy, N. (2014). Parochial cooperation in humans: forms and functions of self-sacrifice in intergroup conflict. Advances in Motivation Science, 1, 1-47. https://doi.org/10.1016/bs.adms.2014.08.001
- Engel, C. (2011). Dictator games: a meta study. Experimental Economics, 14, 583-610. https://doi.org/10.1007/s10683-011-9283-7
- Everett, J. A. C., Faber, N. S., & Crockett, M. (2015). Preferences and beliefs in ingroup favoritism. Frontiers in Behavioral Neuroscience, 9, 15. https://doi.org/10.3389/fnbeh.2015.00015
- Fehrler, S., & Przepiorka, W. (2016). Choosing a partner for social exchange: charitable giving as a signal of trustworthiness. Journal of Economic Behavior & Organization, 129, 157-171. https://doi.org/10.1016/j.jebo.2016.06.006
- Feinberg, M., Willer, R., & Schultz, M. (2014). Gossip and ostracism promote cooperation in groups. Psychological Science, 25, 656-664. https://doi.org/10.1177/0956797613510184
- Filiz-Ozbay, E., & Ozbay, E. Y. (2014). Effect of an audience in public goods provision. Experimental Economics, 17, 200-214. https://doi.org/10.1007/s10683-013-9363-y
- Gambetta, D., & Przepiorka, W. (2014). Natural and strategic generosity as signals of trustworthiness. PLoS ONE, 9, e97533. https://doi.org/10.1371/journal.pone.0097533
- Gintis, H., Smith, E. A., & Bowles, S. (2001). Costly signaling and cooperation. Journal of Theoretical Biology, 213, 103-119. https://doi.org/10.1006/jtbi.2001.2406
- Glazer, A., & Konrad, K. (1996). A signaling explanation for charity. The American Economic Review, 86, 1019-1028. https://www.jstor.org/stable/2118317
- Hackel, L. M., Zaki, J., & Van Bavel, J. J. (2017). Social identity shapes social valuation: evidence from prosocial behavior and vicarious reward. Social Cognitive and Affective Neuroscience, 12, 1219-1228. https://doi.org/10.1093/scan/nsx045
- Hardy, C. L., & Van Vugt, M. (2006). Nice guys finish first: the competitive altruism hypothesis. Personality and Social Psychology Bulletin, 32, 1402-1413. https://doi.org/10.1177/0146167206291006
- Hoffman, M., Yoeli, E., & Nowak, M. A. (2015). Cooperate without looking: why we care what people think and not just what they do. Proceedings of the National Academy of Sciences of the United States of America, 112, 1727-1732. https://doi.org/10.1073/pnas.1417904112
- Hopkins, N., Reicher, S., Harrison, K., Cassidy, C., Bull, R., & Levine, M. (2007). Helping to improve the group stereotype: on the strategic dimension of prosocial behavior.
 Personality and Social Psychology Bulletin, 33, 776-788.
 https://doi.org/10.1177/0146167207301023
- Kiyonari, T., Tanida, S., & Yamagishi, T. (2000). Social exchange and reciprocity: confusion or a heuristic? Evolution and Human Behavior, 21, 411-427. https://doi.org/10.1016/S1090-5138(00)00055-6
- Kraft-Todd, G. T., & Rand, D. G. (2019). Rare and costly prosocial behaviors are perceived as heroic. Frontiers in Psychology, 10, 234. https://doi.org/10.3389/fpsyg.2019.00234
- Leimar, O., & Hammerstein, P. (2001). Evolution of cooperation through indirect reciprocity. Proceedings of the Royal Society B: Biological Sciences, 268, 745-753. https://doi.org/10.1098/rspb.2000.1573
- Marques, J. M., Abrams, D., & Serôdio, R. G. (2001). Being better by being right: subjective group dynamics and derogation of in-group deviants when generic norms are undermined. Journal of Personality and Social Psychology, 81, 436-447. https://doi.org/10.1037/0022-3514.81.3.436
- McClintock, C. G., & Allison, S. T. (1989). Social value orientation and helping behavior. Journal of Applied Social Psychology, 19, 353-362. https://doi.org/10.1111/j.1559-1816.1989.tb00060.x

- Mifune, N., Hashimoto, H., & Yamagishi, T. (2010). Altruism toward in-group members as a reputation mechanism. Evolution and Human Behavior, 31, 109-117. https://doi.org/10.1016/j.evolhumbehav.2009.09.004
- Milinski, M., Semmann, D., & Krambeck, H. J. (2002). Reputation helps solve the 'tragedy of the commons.' Nature, 415, 424-426. https://doi.org/10.1038/415424a
- Nowak, M. A., & Sigmund, K. (1998). Evolution of indirect reciprocity by image scoring. Nature, 393, 573-577. https://doi.org/10.1038/31225
- Nowak, M. A., & Sigmund, K. (2005). Evolution of indirect reciprocity. Nature, 437, 1291-1298. https://doi.org/10.1038/nature04131
- Owuamalam, C. K., & Zagefka, H. (2011). Downplaying a compromised social image: the effects of metastereotype valence on social identification. European Journal of Social Psychology, 41, 528-537. https://doi.org/10.1002/ejsp.805
- Parks, C. D., & Stone, A. B. (2010). The desire to expel unselfish members from the group. Journal of Personality and Social Psychology, 99, 303-310. https://doi.org/10.1037/a0018403
- Peacey, M., & Sanders, M. (2013). Masked Heroes: endogenous anonymity in charitable giving. The Centre for Market and Public Organisation 13/303, Department of Economics, University of Bristol, UK. https://ideas.repec.org/p/bri/cmpowp/13-303.html
- Piazza, J., & Bering, J. M. (2008). Concerns about reputation via gossip promote generous allocations in an economic game. Evolution and Human Behavior, 29, 172-178. https://doi.org/10.1016/j.evolhumbehav.2007.12.002
- Price, M. E. (2003). Pro-community altruism and social status in a Shuar village. Human Nature, 14, 191-208. https://doi.org/10.1007/s12110-003-1003-3
- Raihani, N. J. (2014). Hidden altruism in a real-world setting. Biology Letters, 10, 20130884. https://doi.org/10.1098/rsbl.2013.0884
- Rand, D. G., & Epstein, Z. G. (2014). Risking your life without a second thought: intuitive decision-making and extreme altruism. PLoS ONE, 9, e109687. https://doi.org/10.1371/journal.pone.0109687
- Rand, D. G., Pfeiffer, T., Dreber, A., Sheketoff, R. W., Wernerfelt, N. C., & Benkler, Y. (2009). Dynamic remodeling of in-group bias during the 2008 residential election. Proceedings of the National Academy of Sciences of the United States of America, 106, 6187-6191. https://doi.org/10.1073/pnas.0811552106
- Roberts, G. (1998). Competitive altruism: from reciprocity to the handicap principle. Proceedings of the Royal Society B: Biological Sciences, 265, 427-431. https://doi.org/10.1098/rspb.1998.0312
- Romano, A., Balliet, D., & Wu, J. (2017). Unbounded indirect reciprocity: is reputation-based cooperation bounded by group membership? Journal of Experimental Social Psychology, 71, 59-67. https://doi.org/10.1016/j.jesp.2017.02.008
- Semmann, D., Krambeck, H. J., & Milinski, M. (2004). Strategic investment in reputation. Behavioral Ecology and Sociobiology, 56, 248-252. https://doi.org/10.1007/s00265-004-0782-9
- Sisco, M. R., & Weber, E. U. (2019). Examining charitable giving in real-world online donations. Nature Communications, 10, 3968. https://doi.org/10.1038/s41467-019-11852-z
- Soetevent, A. R. (2005). Anonymity in giving in a natural context—a field experiment in 30 churches. Journal of Public Economics, 89, 2301-2323. https://doi.org/10.1016/j.jpubeco.2004.11.002
- Sunstein, C. R. (2017). Default rules are better than active choosing (often). Trends in Cognitive Sciences, 21, 600-606. https://doi.org/10.1016/j.tics.2017.05.003

- Sylwester, K., & Roberts, G. (2010). Cooperators benefit through reputation-based partner choice in economic games. Biology Letters, 6, 659-662. https://doi.org/10.1098/rsbl.2010.0209
- Sylwester, K., & Roberts, G. (2013). Reputation-based partner choice is an effective alternative to indirect reciprocity in solving social dilemmas. Evolution and Human Behavior, 34, 201-206. https://doi.org/10.1016/j.evolhumbehav.2012.11.009
- Van Lange, P. A. M., & Liebrand, W. B. G. (1991). The influence of other's morality and own social value orientation on cooperation in the Netherlands and the U.S.A. International Journal of Psychology, 26, 4290449. https://doi.org/10.1080/00207599108247133
- van Leeuwen, E., & Jongh, L. (2015). The effects of negative images on young people's willingness to help elderly people. Journal of Community & Applied Social Psychology, 25, 276-281. https://doi.org/10.1002/casp.2208
- Van Vugt, M., Roberts, G., & Hardy, C. (2012). Competitive altruism: a theory of reputation-based cooperation in groups. In L. Barrett & R. Dunbar (Eds.), Oxford Handbook of Evolutionary Psychology. Oxford University Press. https://doi.org/10.1093/oxfordhb/9780198568308.013.0036
- Wedekind, C., & Milinski, M. (2000). Cooperation through image scoring in humans. Science, 288, 850-852. https://doi.org/10.1126/science.288.5467.850
- Wu, J., Balliet, D., & Van Lange, P. A. M. (2015). When does gossip promote generosity? Indirect reciprocity under the shadow of the future. Social Psychological and Personality Science, 6, 923-930. https://doi.org/10.1177/1948550615595272
- Wu, J., Balliet, D., & Van Lange, P. A. M. (2016a). Reputation, gossip, and human cooperation. Social and Personality Psychology Compass, 10, 350-364. https://doi.org/10.1111/spc3.12255
- Wu, J., Balliet, D., & Van Lange, P. A. M. (2016b). Reputation management: why and how gossip enhances generosity. Evolution and Human Behavior, 37, 193-201. https://doi.org/10.1016/j.evolhumbehav.2015.11.001
- Yamagishi, T., Jin, N., & Kiyonari, T. (1999). Bounded generalized reciprocity: ingroup boasting and ingroup favouritism. Advances in Group Processes, 16, 161-197.
- Yazdi, H., Heyman, G. D., & Barner, D. (2020). Children are sensitive to reputation when giving to both ingroup and out-group members. Journal of Experimental Child Psychology, 194, 104814. https://doi.org/10.1016/j.jecp.2020.104814
- Zahavi, A., & Zahavi, A. (1999). The handicap principle: a missing piece of Darwin's puzzle. Oxford University Press.