



Commentary: Investigating the Effects of Anger and Guilt on Unethical Behaviour: A Dual-Process Approach

Maria Serena Panasiti^{1,2*} and Giorgia Ponsi^{1,2,3}

¹ Department of Psychology, University of Rome "Sapienza", Rome, Italy, ² Social and Cognitive Neuroscience Laboratory, IRCCS Fondazione Santa Lucia, Rome, Italy, ³ Department of Social Psychology and Social Neuroscience, Institute of Psychology, University of Bern, Bern, Switzerland

Keywords: morality and unethical behavior, deception, deliberation, honesty, intrinsic/extrinsic goals, personality

A commentary on

Investigating the Effects of Anger and Guilt on Unethical Behaviour: A Dual-Process Approach by Motro, D., Ordóñez, L. D., Pittarello, A., and Welsh, D. T. (2016). *J. Bus. Ethics.* 1–16. doi: 10.1007/s10551-016-3337-x

Research provides important evidences about the role of emotions in a wide range of judgments, including moral decisions (Haidt, 2003; Teper et al., 2015). Recent findings show that real compared to hypothetical moral decisions brings about higher physiological activity (Teper et al., 2011). In agreement, studies on the autonomic correlates of deception reported: (i) higher skin conductance (Coricelli et al., 2010); (ii) increased pupil dilation (Hochman et al., 2016); (iii) higher regulation of sympathetic activity before lying for a self-gain when reputation is at risk (Panasiti et al., 2016).

However, there is little evidence regarding the influence of discrete emotions on dishonesty. Notably, exceptions are the few studies reporting that inducing envy (Moran and Schweitzer, 2005; Gino and Pierce, 2009) or anxiety (Kouchaki and Desai, 2015) enhances deception, while inducing anger or fear oppositely influences hypothetical ethical decisions (Klignyte et al., 2013).

In their recent paper, Motro et al. (2016) made considerable advances in the literature, by reporting that induction of anger and guilt enhances and decreases deception, respectively. Crucially, they also report that the influence of these emotions on deception is mediated by the increment of impulsive thinking in the case of anger and by the enhancement of deliberate thinking in the case of guilt. In this commentary, we propose an additional explanation of their findings that aims at connecting the authors' results with those of other important studies about deception.

On the one hand, Motro's results nicely fit with studies showing that guilt induction reduces cheating when experiencing physical weights (Kouchaki et al., 2014) and that anger promotes deception by reducing empathy and enhancing self-interest (Yip and Schweitzer, 2016). Also developmental research shows that in 4- and 8-years old children, anger enhances immoral (aggressive) behavior, and that this increment is mitigated by children's ability to anticipate guilt (Colasante et al., 2016).

Moreover, the mediation of deliberate vs impulsive thinking supports the Theory of "Deliberate Honesty" according to which, when deception is tempting, dishonesty is the immediate choice while honesty would require reflection (Bereby-Meyer and Shalvi, 2015).

On the other hand, recent theories posit that any choice could be impulsive or deliberate depending on the value-based computation between alternatives (Berkman et al., 2016). Accordingly, the Self-Concept Maintenance Hypothesis (Mazar et al., 2008) proposes that deciding whether to deceive involves a conflict between the temptation to dishonestly achieve some benefit

OPEN ACCESS

Edited by:

Michael Noll-Hussong,
University of Ulm, Germany

Reviewed by:

Shane Connelly,
University of Oklahoma, USA
Paolo Antonetti,
Queen Mary University of London, UK

*Correspondence:

Maria Serena Panasiti
m.serenapanasiti@gmail.com

Specialty section:

This article was submitted to
Emotion Science,
a section of the journal
Frontiers in Psychology

Received: 14 November 2016

Accepted: 24 January 2017

Published: 08 February 2017

Citation:

Panasiti MS and Ponsi G (2017)
Commentary: Investigating the Effects
of Anger and Guilt on Unethical
Behaviour: A Dual-Process Approach.
Front. Psychol. 8:159.
doi: 10.3389/fpsyg.2017.00159

(extrinsic goal) and the desire to act according to internalized social norms (intrinsic goal). This conflict is modulated by several variables: dishonesty is enhanced by anonymity (Zhong et al., 2010), time-pressure (Shalvi et al., 2012), monetary priming (Gino and Mogilner, 2014), sense of entitlement (Poon et al., 2013; Schurr and Ritov, 2016), and positive self-concept activation (Khan and Dhar, 2006; Brown et al., 2011); conversely, honesty is enhanced by reading statements that endorse free-will (Vohs and Schooler, 2008), the Ten Commandments (Mazar et al., 2008), a code of honor (Shu et al., 2011), or by the need to safeguard one's own reputation (Panasiti et al., 2011, 2014, 2016).

Here, we propose that anger and guilt might have enhanced the salience of extrinsic (money) vs. intrinsic (honesty) goals, respectively. Anger is triggered when the achievement of one's important extrinsic goal is prevented by somebody or something (Lazarus and Lazarus, 1994; Turner, 2007), or when someone else behaves unfairly (i.e., in a way that prevents others to reach their extrinsic goal; Pillutla and Murnighan, 1996). Differently, guilt is evoked by the awareness that we did not act morally (Sheikh and Janoff-Bulman, 2010) and thus that we did not accomplish an intrinsic goal. These links are supported by findings showing that: (i) anger facilitates attention (He et al., 2013) and gaze-imitation (Terburg et al., 2012) toward rewarding cues and it is associated with reward-related electrocortical activity (Angus et al., 2015); (ii) baseline activity of the insula and guilt aversion promote the achievement of intrinsic social goals (Chang et al., 2011; Baumgartner et al., 2013).

This alternative explanation aims at reconciling the seeming inconsistency between Motro's results and the studies that show how deliberation and impulsivity are not necessarily linked to honesty and dishonesty, respectively. It has been showed for example that inducing a deliberate vs. intuitive mindset increases deception (Zhong, 2011) and that honesty is the default choice for most people (Xu and Ma, 2015).

Moreover, Machiavellians and psychopaths who are strategically dishonest and show low sense of guilt, constitute

perfect examples of why deliberation (i) is not always triggered by guilt and (ii) is not necessarily associated to honesty. In particular, Machiavellian people feel low sense of guilt for lying (Gozna et al., 2001); have no need to down-regulate their autonomic system before lying (Panasiti et al., 2016), and show no cortical motor inhibition nor reputation effects for lying (Panasiti et al., 2011, 2014). They are also highly strategic (Jones and Paulhus, 2012) and this bring them to a great deal of deception during their everyday life (Kashy and DePaulo, 1996). Similarly, psychopaths are more likely to perform premeditated (deliberate) than impulsive crimes (Swogger et al., 2010), and show a weaker modulation of anticipated guilt in anterior insula (Seara-Cardoso et al., 2016).

Here, we suggest that despite a change in goals' salience might in turn cause a change in the propensity of using deliberate vs. impulsive thinking, style of thinking alone might not be sufficient to modulate participants' ethical behavior. Differently, the crucial modulation might lie in the change of goals' salience itself. This interpretation would explain why (i) manipulative and psychopathic people who are more attracted to extrinsic than intrinsic goals (Mchoskey, 1999) engage in deliberate thinking and yet behave dishonestly; (ii) inducing an impulsive setting without priming extrinsic goals enhances honesty (Zhong, 2011); (iii) honesty becomes the default choice as participants' moral identity increases (Xu and Ma, 2015).

AUTHOR CONTRIBUTIONS

MSP and GP have made substantial, direct, and intellectual contribution to the work, and approved it for publication.

ACKNOWLEDGMENTS

The authors are grateful to Prof. Salvatore Maria Aglioti for his comments.

REFERENCES

- Angus, D. J., Kemkes, K., Schutter, D. J., and Harmon-Jones, E. (2015). Anger is associated with reward-related electrocortical activity: evidence from the reward positivity. *Psychophysiology* 52, 1271–1280. doi: 10.1111/psyp.12460
- Baumgartner, T., Gianotti, L. R., and Knoch, D. (2013). Who is honest and why: baseline activation in anterior insula predicts inter-individual differences in deceptive behavior. *Biol. Psychol.* 94, 192–197. doi: 10.1016/j.biopsycho.2013.05.018
- Bereby-Meyer, Y., and Shalvi, S. (2015). Deliberate honesty. *Curr. Opin. Psychol.* 6, 195–198. doi: 10.1016/j.copsyc.2015.09.004
- Berkman, E., Hutcherson, C., Livingston, J. L., Kahn, L. E., and Inzlicht, M. (2016). *Self-Control as Value-Based Choice*. doi: 10.2139/ssrn.2665823. Available online at: <https://ssrn.com/abstract=2665823>
- Brown, R. P., Tamborski, M., Wang, X., Barnes, C. D., Mumford, M. D., Connelly, S., et al. (2011). Moral credentialing and the rationalization of misconduct. *Ethics Behav.* 21, 1–12. doi: 10.1080/10508422.2011.537566
- Chang, L. J., Smith, A., Dufwenberg, M., and Sanfey, A. G. (2011). Article triangulating the neural, psychological, and economic bases of guilt aversion. *Neuron* 70, 560–572. doi: 10.1016/j.neuron.2011.02.056
- Colasante, T., Zuffianò, A., and Malti, T. (2016). Daily deviations in anger, guilt, and sympathy: a developmental diary study of aggression. *J. Abnorm. Child Psychol.* 44, 1515–1526. doi: 10.1007/s10802-016-0143-y
- Coricelli, G., Joffily, M., Montmarquette, C., and Villeval, M. C. (2010). Cheating, emotions, and rationality: an experiment on tax evasion. *Exp. Econ.* 13, 226–247. doi: 10.1007/s10683-010-9237-5
- Gino, F., and Mogilner, C. (2014). Time, money, and morality. *Psychol. Sci.* 25, 414–421. doi: 10.1177/0956797613506438
- Gino, F., and Pierce, L. (2009). Dishonesty in the name of equity. *Psychol. Sci. J. Am. Psychol. Soc.* 20, 1153–1160. doi: 10.1111/j.1467-9280.2009.02421.x
- Gozna, L., Vrij, A., and Bull, R. (2001). The impact of individual differences on perceptions of lying in everyday life and in a high stake situation. *Pers. Individ. Dif.* 31, 1203–1216. doi: 10.1016/S0191-8869(00)00219-1
- Haidt, J. (2003). "The moral emotions," in *Handbook of Affective Sciences*, eds R. J. Davidson, K. R. Scherer, and H. H. Goldsmith (Oxford: Oxford University Press), 852–870.
- He, J., Jin, X., Zhang, M., Huang, X., Shui, R., and Shen, M. (2013). Anger and selective attention to reward and punishment in children. *J. Exp. Child Psychol.* 115, 389–404. doi: 10.1016/j.jecp.2013.03.004
- Hochman, G., Glöckner, A., Fiedler, S., and Ayal, S. (2016). "I can see it in your eyes": biased processing and increased arousal in dishonest responses. *J. Behav. Decis. Mak.* 29, 322–335. doi: 10.1002/bdm.1932
- Jones, D. N., and Paulhus, D. L. (2012). "Differentiating the dark triad within the interpersonal circumplex," in *Handbook of Interpersonal Psychology: Theory, Research, Assessment, and Therapeutic Interventions*, eds L. M.

- Horowitz and S. Strack (New York, NY: Wiley & Sons), 249–267. doi: 10.1002/9781118001868.ch15
- Kashy, D. A., and DePaulo, B. M. (1996). Who lies? *J. Pers. Soc. Psychol.* 70, 1037–1051. doi: 10.1037/0022-3514.70.5.1037
- Khan, U., and Dhar, R. (2006). Licensing effect in consumer choice. *J. Mark. Res.* 43, 259–266. doi: 10.1509/jmkr.43.2.259
- Klityte, V., Connelly, S., Thiel, C., and Devenport, L. (2013). The Influence of anger, fear, and emotion regulation on ethical decision making. *Hum. Perform.* 26, 297–326. doi: 10.1080/08959285.2013.814655
- Kouchaki, M., and Desai, S. D. (2015). Anxious, threatened, and also unethical: how anxiety makes individuals feel threatened and commit unethical acts. *J. Appl. Psychol.* 100, 360–375. doi: 10.1037/a0037796
- Kouchaki, M., Gino, F., and Jami, A. (2014). The burden of guilt: heavy backpacks, light snacks, and enhanced morality. *J. Exp. Psychol. Gen.* 143, 414–424. doi: 10.1037/a0031769
- Lazarus, R. S., and Lazarus, B. N. (1994). *Passion and Reason: Making Sense of our Emotions*. New York, NY: Oxford: Oxford University Press, Inc.
- Mazar, N., Amir, O., and Ariely, D. (2008). The dishonesty of honest people: a theory of self-concept maintenance. *J. Mark. Res.* 45, 633–644. doi: 10.1509/jmkr.45.6.633
- Mchiskey, J. W. (1999). Machiavellianism, intrinsic versus extrinsic goals, and social interest: a self-determination theory analysis. *Motiv. Emot.* 23, 267–283. doi: 10.1023/A:1021338809469
- Moran, S., and Schweitzer, M. E. (2005). When better is worse: envy and the use of deception in negotiations. *Negot. Confl. Manag. Res.* 1, 3–29. doi: 10.1111/j.1750-4716.2007.00002.x
- Motro, D., Ordóñez, L. D., Pittarello, A., and Welsh, D. T. (2016). Investigating the effects of anger and guilt on unethical behaviour: a dual-process approach. *J. Bus. Ethics* 1–16. doi: 10.1007/s10551-016-3337-x
- Panasiti, M. S., Cardone, D., Pavone, E. F., Mancini, A., Merla, A., and Aglioti, S. M. (2016). Thermal signatures of voluntary deception in ecological conditions. *Sci. Rep.* 6:35174. doi: 10.1038/srep35174
- Panasiti, M. S., Pavone, E. F., Mancini, A., Merla, A., Grisoni, L., and Aglioti, S. M. (2014). The motor cost of telling lies: electrocortical signatures and personality foundations of spontaneous deception. *Soc. Neurosci.* 9, 573–589. doi: 10.1080/17470919.2014.934394
- Panasiti, M. S., Pavone, E. F., Merla, A., and Aglioti, S. M. (2011). Situational and dispositional determinants of intentional deceiving. *PLoS ONE* 6:e19465. doi: 10.1371/journal.pone.0019465
- Pillutla, M. M., and Murnighan, J. K. (1996). Unfairness, anger, and spite: emotional rejections of ultimatum offers. *Organ. Behav. Hum. Decis. Process.* 68, 208–224. doi: 10.1006/obhd.1996.0100
- Poon, K.-T., Chen, Z., and Dewall, C. N. (2013). Feeling entitled to more: ostracism increases dishonest behavior. *Pers. Soc. Psychol. Bull.* 39, 1227–1239. doi: 10.1177/0146167213493187
- Schurr, A., and Ritov, I. (2016). Winning a competition predicts dishonest behavior. *Proc. Natl. Acad. Sci. U.S.A.* 113, 1754–1759. doi: 10.1073/pnas.1515102113
- Seara-Cardoso, A., Sebastian, C. L., McCrory, E., Foulkes, L., Buon, M., Roiser, J. P., et al. (2016). Anticipation of guilt for everyday moral transgressions: the role of the anterior insula and the influence of interpersonal psychopathic traits. *Sci. Rep.* 6:36273. doi: 10.1038/srep36273
- Shalvi, S., Eldar, O., and Bereby-Meyer, Y. (2012). Honesty requires time (and lack of justifications). *Psychol. Sci.* 23, 1264–1270. doi: 10.1177/0956797612443835
- Sheikh, S., and Janoff-Bulman, R. (2010). The “shoulds” and “should nots” of moral emotions: a self-regulatory perspective on shame and guilt. *Pers. Soc. Psychol. Bull.* 36, 213–224. doi: 10.1177/0146167209356788
- Shu, L. L., Gino, F., and Bazerman, M. H. (2011). Dishonest deed, clear conscience: when cheating leads to moral disengagement and motivated forgetting. *Pers. Soc. Psychol. Bull.* 37, 330–349. doi: 10.1177/0146167211398138
- Swogger, M. T., Walsh, Z., Houston, R. J., Cashman-Brown, S., and Conner, K. R. (2010). Psychopathy and axis I psychiatric disorders among criminal offenders: relationships to impulsive and proactive aggression. *Aggress. Behav.* 36, 45–53. doi: 10.1002/ab.20330
- Teper, R., Inzlicht, M., and Page-Gould, E. (2011). Are we more moral than we think? Exploring the role of affect in moral behavior and moral forecasting. *Psychol. Sci. J. Am. Psychol. Soc.* 22, 553–558. doi: 10.1177/0956797611402513
- Teper, R., Zhong, C. B., and Inzlicht, M. (2015). How emotions shape moral behavior: some answers (and questions) for the field of moral psychology. *Soc. Pers. Psychol. Compass* 9, 1–14. doi: 10.1111/spc3.12154
- Terburg, D., Aarts, H., Putman, P., and van Honk, J. (2012). In the eye of the beholder: reduced threat-bias and increased gaze-imitation towards reward in relation to trait anger. *PLoS ONE* 7:e31373. doi: 10.1371/journal.pone.0031373
- Turner, M. M. (2007). Using emotion in risk communication: the anger activism model. *Public Relat. Rev.* 33, 114–119. doi: 10.1016/j.pubrev.2006.11.013
- Vohs, K. D., and Schooler, J. W. (2008). The value of believing in free will: encouraging a belief in determinism increases cheating. *Psychol. Sci.* 19, 49–54. doi: 10.1111/j.1467-9280.2008.02045.x
- Xu, Z. X., and Ma, H. K. (2015). Does honesty result from moral will or moral grace? Why moral identity matters. *J. Bus. Ethics* 127, 371–384. doi: 10.1007/s10551-014-2050-x
- Yip, J. A., and Schweitzer, M. E. (2016). Mad and misleading: incidental anger promotes deception. *Organ. Behav. Hum. Decis. Process.* 137, 207–217. doi: 10.2139/ssrn.2478692
- Zhong, C.-B. (2011). The ethical dangers of deliberative decision making. *Adm. Sci. Q.* 56, 1–25. doi: 10.2189/asqu.2011.56.1.001
- Zhong, C.-B., Bohns, V. K., and Gino, F. (2010). Good lamps are the best police: darkness increases dishonesty and self-interested behavior. *Psychol. Sci.* 21, 311–314. doi: 10.1177/0956797609360754

Conflict of Interest Statement: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Copyright © 2017 Panasiti and Ponsi. This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY). The use, distribution or reproduction in other forums is permitted, provided the original author(s) or licensor are credited and that the original publication in this journal is cited, in accordance with accepted academic practice. No use, distribution or reproduction is permitted which does not comply with these terms.