



King's Research Portal

DOI: 10.1002/ejsp.2065

Document Version Peer reviewed version

Link to publication record in King's Research Portal

Citation for published version (APA):

Cantarero, K., & van Tilburg, W. A. P. (2014). Too tired to taint the truth: Ego-depletion reduces other-benefiting dishonesty. *European Journal of Social Psychology*, *44*(7), 743–747. https://doi.org/10.1002/ejsp.2065

Citing this paper

Please note that where the full-text provided on King's Research Portal is the Author Accepted Manuscript or Post-Print version this may differ from the final Published version. If citing, it is advised that you check and use the publisher's definitive version for pagination, volume/issue, and date of publication details. And where the final published version is provided on the Research Portal, if citing you are again advised to check the publisher's website for any subsequent corrections.

General rights

Copyright and moral rights for the publications made accessible in the Research Portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognize and abide by the legal requirements associated with these rights.

•Users may download and print one copy of any publication from the Research Portal for the purpose of private study or research. •You may not further distribute the material or use it for any profit-making activity or commercial gain •You may freely distribute the URL identifying the publication in the Research Portal

Take down policy

If you believe that this document breaches copyright please contact librarypure@kcl.ac.uk providing details, and we will remove access to the work immediately and investigate your claim.

Too Tired to Taint the Truth: Ego-Depletion Reduces Other-Benefitting Dishonesty

> Katarzyna Cantarero Polish Academy of Sciences & Wijnand A. P. van Tilburg University of Southampton

Word count: 3,897

Abstract

Numerous studies indicate that ego-depletion increases the occurrence of self-benefitting dishonest behavior by undermining resistance to short-term temptations associated with dishonesty. Turning this phenomenon around, we examined whether ego-depletion can, counter-intuitively, *reduce* dishonest behavior in a context where dishonesty serves to benefit *others*. Specifically, based on the notion that ego-depletion reduces commitment to long-term/abstract goals and interferes with self-control, we proposed and found in an experiment that ego-depleted people are less likely to display dishonest behavior that spares another person from an unpleasant truth. These findings have implications for the study of dishonesty and moral dilemmas in interpersonal settings.

Keywords: dishonesty; ego-depletion; self-control

Too Tired to Taint the Truth:

Ego-Depletion Reduces Other-Benefitting Dishonesty

Dishonesty is a widespread phenomenon that can be observed on a daily basis, with an approximate lying frequency of one lie for every four social interactions (DePaulo, Kashy, Kirkendol, Wyer, & Epstein, 1996). Dishonesty, and in particular lying, is often employed to the benefit of oneself, for example to gain personal advantage or to protect oneself from loss of face or embarrassment. However, dishonesty can also be intended to serve others, for instance when one lies to save somebody from being hurt or when "the truth is likely to result in disutility to others" (Erat & Gneezy, 2011, p. 723). In all, dishonesty in general, and lying in particular, is a widespread and influential phenomenon.

What are the conditions for dishonesty to emerge? One particularly well documented source is ego-depletion—a phenomenon under which self-control is impaired—which fosters self-benefitting dishonesty (Mead, Baumeister, Gino, Schweitzer, & Ariely, 2009). Could there be conditions in which ego-depletion instead *reduces* dishonesty? We suggest so. Specifically, we proposed and tested whether ego-depletion reduces dishonest behavior when the *beneficiary* of the dishonesty is *another* person. We first review the psychological study of dishonesty and ego-depletion.

Dishonesty and Lying

All types of dishonest behavior prototypically occur to gain benefits that by truthful means would not be achievable. A lie is a more specific form of dishonesty and occurs when people "intentionally try to mislead someone" (DePaulo et al., 1996, p. 981, see also e.g. Ekman, 1985). Lies, when communicated, are hardly ever goals by themselves, but rather serve as means to an end (Miller & Stiff, 1993).

Dishonesty and lying in particular may be driven by egoistic or other-benefitting motivations. The vast majority of research has focused on egoistic lies (e.g. Ackert, Church, Kuang, & Qi, 2011; Gneezy, 2005). Indeed, people more often report the use of selfbenefitting than other-benefitting lies in everyday communication (DePaulo et al., 1996). In the present research we focus on such other-benefiting dishonesty, particularly otherbenefitting lies, where the motivation to benefit another person (and not the self) is predominant. Such lies appear in interpersonal communication less often than egoistic lies (DePaulo et al., 1996) and have been studied in far less detail compared to egoistic lies. Interestingly, whereas lying for self-benefit tends to be evaluated negatively cross-culturally (Inglehart, Basañez, & Moreno, 1998), other-benefitting lies are more socially accepted than their egoistic counterparts (Lindskold & Walters, 1983), suggesting that they may serve an important social benefit.

Although self-benefiting lies can result in substantial profits, it is not a predominant form of interpersonal communication. One of the negative consequences of (discovered) dishonesty, including lies, is a breach of interpersonal trust (Schweitzer, Hershey, & Bradlow, 2006) which poses challenges to interpersonal relations. Interestingly, not only the consequences of lying refrain people from doing so. Rather, people display a general aversion to lying (e.g. Erat & Gneezy, 2011; Lundquist, Ellingsen, Gribbe, & Johannesson, 2009). One reason for this aversion is that dishonesty, including lying, is a psychologically costly process (Mazar & Ariely, 2006). As part of this process, people seek to strike a balance between the benefits of deviating from truth, and the negative implications this has on their self-concepts and the fear of getting caught (Mazar, Amir, & Ariely, 2008; Shalvi, Handgraaf, & DeDreu, 2011). Thus, the decision to act in a dishonest way involves a trade-off: On the one hand, it can result in social and personal disapproval; on the other hand, there are tempting benefits that can be achieved by acting dishonestly. Interestingly, tempering with self-control resources proves to be one of the factors that enhances dishonesty (Mead, Baumeister, Gino, Schweitzer, & Ariely, 2009), and we turn to this literature next.

Self-Control, Ego-Depletion, and Dishonesty

Exerting self-control involves overriding or changing personal impulses and refraining from undesired behavior (Tangney, Baumeister & Boone, 2004). Importantly, self-control is effortful; when people exert high self-control in one activity, their performance in subsequent self-control tasks is typically impaired, and many scholars have consistently argued that self-control is a limited resource that requires time to 'recharge' (e.g., Baumeister, Vohs, & Tice, 2007; Muraven, Tice, & Baumeister, 1998; Muraven & Baumeister, 2000). Self-control has

4

been metaphorically described as a 'moral muscle' that prevents people from acting in an immoral, antisocial way, or selfish way (Baumeister & Exline, 1999). As a consequence, depletion of self-control resources can foster selfish decisions that negatively impact others. Indeed, ego depletion reduces prosocial behavior such as volunteering hours to help a victim or donating money to charity (DeWall, Baumeister, Gailliot, & Maner, 2008; Xu, Begue, & Bushman, 2012). In situations that tempt people to behave in a dishonest way, for example when higher performance in a task means receiving a higher monetary gain, people need to exert self-control to overcome short-term temptation, and depleted self-control resources lead to self-benefitting dishonest behavior (Mead, Baumeister, Gino, Schweitzer, & Ariely, 2009).

Most dishonest behavior is motivated based on personal benefit associated with it. A lack of self-control, for example resulting from ego-depletion, reduces people's capacity to resist these self-benefitting temptations and consequently increases dishonesty (Gino, Schweitzer, Mead, & Ariely, 2011). As noted before, however, some types of dishonest behavior are employed to the benefit of *others*, for example to protect them from having their feelings hurt. This change in the short-term benefactor of the dishonest behavior poses an intriguing variation in the self-control dilemma that stands at the basis of dishonest behavior. Specifically, will dishonesty for the benefit of others also be influenced by self-control? Should we expect ego depletion to promote other-benefitting lying? We posit that when people are ego-depleted, they become less willing to lie for the benefit of another person.

In case of other-benefitting lies, *honest* behavior is typically associated with relative short-term self-benefits (e.g., maintaining moral integrity), and accordingly we posit a process contrary to the typical ego-depletion effect on lying. Specifically, the cost for the self in other-benefitting lies will be relatively higher than being honest, which primarily hurts the other and not the self, at least in terms of its immediate consequences. As a result, lying for the benefit of others will require self-control, and should hence diminish when ego-depleted.

Method

We hypothesized that depletion of self-control resources leads to more truthful replies when lying benefits others as opposed to the self. Specifically, we examined whether lying *diminished* as a function of ego-depletion in a context where lying benefitted the other rather than the self in the short-term. This was facilitated by testing the impact of ego-depletion on other-benefitting lying in the context of evaluations of a drawing allegedly created by a child who was much older than people expected. Specifically, participants were asked to voice their personal opinions about a picture drawn by a child and, after an ego-depletion manipulation, indicated the *feedback* they would communicate to the child, who turned out to be of an age much higher than anticipated. In this setting, lying involved a self-other conflict between maintaining internal moral standards of not lying (self), and trying not to hurt the child (other). Accordingly, we hypothesized that ego-depleted participants would be more inclined to adopt the here 'selfish' option of telling the painful truth, as opposed to non-depleted participants who would communicate more other-benefitting lies.

Participants and Design

Participants consisted of 153 undergraduate students (103 women, 50 men; $M_{age} =$ 19.32, $SD_{age} = 4.03$) from a Western-European university who were randomly assigned to an ego-depletion or control condition in a paper-and-pencil study.

Procedure and Materials.

After giving informed consent and reporting demographic information, participants completed Tangney, Baumeister, and Boone's (2004) self-control scale, consisting of 36 items (e.g., "I am good at resisting temptation.", "I do certain things that are bad for me, if they are fun.", reversed), rated on five-point scales ($1 = not at all, 5 = very much; \alpha = .86$); this scale served to control for individual differences in self-control.

Participants were then presented with a child's drawing depicting four figures, each consisting of a roughly drawn smiling face with stick-figure arms and legs, without torso. A variety of colors was used, especially in the vertical and horizontal 'rainbows' that appeared above the figures. To assure participants' careful assessment of the picture, we asked them to briefly write down "what you think about the quality of this drawing." To quantify this evaluation, participants then indicated which of six statements described their *impression* of the drawing. Three of these statements were positive ("This drawing is pretty", "The creator of this drawing has done an excellent job", "This drawing is skillfully made") and three were negative ("This drawing is ugly", "The creator of this drawing could have done a better job",

"This drawing looks badly done"). Participants could select as many or as few statements as they preferred. Participant then indicated how old they expected the child to be that had drawn this picture.

Next, we manipulated ego-depletion inspired by Baumeister, Bratslavsky, Muraven, and Tice (1998). Participants were presented with an extract from a technical physiology paper, and those in the control condition were asked to cross out the letter 'e'. In the ego-depletion condition, however, participants were to leave the letter 'e' uncrossed when adjacent to another vowel or separated by only a single consonant. Similar tasks have been shown to reliably drain self-control resources (Baumeister et al., 1998).

After the ego-depletion task, we measured the proclivity to lie for other-benefitting purposes. Participants learned that "a 10 year old child drew this picture as a present for you." To assure their careful consideration of this information, participants briefly wrote down what they would say to this child after receiving the gift. They then quantified their *communicated* feedback related to the picture quality. Specifically, they indicated which of the six statements used in their original evaluation of the drawing previously they would communicate to the child (e.g., "You made an ugly drawing", "You made a pretty drawing").

Next, participants completed the positive and negative affect schedule (PANAS-X; Watson, Clark, & Tellengen, 1988), consisting of five items measuring positive affect (e.g., "To what extent do you feel enthusiastic?"; 1 = not at all, 5 = extremely; α = .79) and five items measuring negative affect (e.g., "To what extent do you feel distressed?", 1 = not at all, 5 = extremely; α = .87). Debriefing concluded the study.

Results

Before the child's age was revealed, participants expected the child to be significantly younger (M = 4.60, SD = 1.33) relative to the later stated age of 10, t(149) = 49.88, p < .001, indicating that the overall quality of the drawing was likely deemed substandard. The communicated message of participants contained more positive statements (M = 0.86, SD =.79) than their initial impressions (M = .65, SD = .73), as indicated by a paired-sample t-test, t(149) = 3.00, p = .003, d = .24. The evaluations also contained less negative statements (M =0.32, SD = 0.47) when given to the child than when initially made (M = 0.59, SD = 0.71), $t(149) = 4.41, p < .001, d = .35.^{1}$ This result suggests a general tendency for participants to lie for the benefit of others in their feedback. Moreover, results of independent t-tests showed that the initial evaluations did not differ between the conditions t(151) = 0.58, p = .562, d =0.09, and neither did participants' self-regulation scores, t(151) = 0.74, p = .458, d = 0.12, nor negative affect $t(148) = 0.20, p = .148, d = 0.03.^{2}$ Interestingly, participants showed more positive affect in the ego-depletion condition (M = 3.52, SD = 0.74) than in the control condition (M = 3.24, SD = 0.80), t(148) = 2.15, p = .033, d = 0.35.

To test whether ego-depletion propelled more truthful feedback, we subjected the amount of positive messages communicated to the child as dependent variable to an ANCOVA with the ego-depletion condition as independent variable, and controlling for individual differences in self-control, initial positive evaluations, and positive and negative affect. This analysis revealed the predicted impact of ego-depletion on the communicated message. Specifically, those in the control condition reported more positive feedback (M = 0.96, SD = 0.81) relative to their ego-depleted counterparts (M = 0.74, SD = 0.77), F(1, 141) = 4.12, p = .044, $\eta_p^2 = .03$. Individual differences in self-regulation were unrelated to the propensity to give an over positive feedback F(1, 141) = 1.42, p = .235, $\eta_p^2 = .01$. Neither positive F(1, 141) = 1.24, p = .267, $\eta_p^2 = .01$, nor negative affect F(1, 141) = .40, p = .529, $\eta_p^2 < .01$ were related to the degree to which the communicated message was positive. Not

¹The difference in initial impression and communicated message was also evident when considering the total positivity after subtracting the amount of negative from positive messages. Specifically, messages were significantly less positive in the initial impression (M= 0.05, SD = 1.28) compared to the communicated message (M = 0.54, SD = 1.14), t(149) = 3.98, p = .001, d = 0.33.

² Small variations in degrees of freedom reflect missing values.

surprisingly, the communicated message was significantly related to the initial evaluation, $F(1, 141) = 18.59, p < .001, \eta_p^2 = .12.^3$

The ANCOVA for negative statements yielded similar results. Communicated messages in the ego-depletion condition were marginally more negative (M = 0.40, SD = 0.49) than in the control condition (M = 0.27, SD = 0.44), F(1, 141) = 3.73, p = .056, $\eta_p^2 = .03$. Self-regulation was unrelated to the negativity of the comments F(1, 141) = 3.17, p = .077, $\eta_p^2 = .02$. Moreover, neither positive affect F(1, 141) = 1.63, p = .204, $\eta_p^2 = .01$, nor negative affect F(1, 141) < 0.01, p = .954, $\eta_p^2 < .01$ influenced the negativity of the comments. Initial negative evaluations were related to the communicated ones F(1, 141) = 5.84, p = .017, $\eta_p^2 = .04$.

Importantly, ego-depletion (M = 1.13, SD = 0.57) did not significantly affect the *overall* number of communicated statements in the message relative to control (M = 1.22, SD = 0.63), F(1, 148) = 0.86, p = .354, $\eta_p^2 = .01$, indicating that the ego-depletion effect on the message content was unlikely due to disengagement. Because positive affect was unrelated to the communicated message, we conclude that even though participants experienced a higher levels of positive affect in the ego-depletion condition, the impact of ego-depletion on the communicated message remained above and beyond positive affect. We conclude that ego-depletion indeed led to *less* other-benefitting lying in the communicated feedback relative to control.

³Again, we also analyzed the endorsement of the positivity of the message by subtracting the number of negative comments from the positive ones. The ANCOVA indicated that the ego-depletion condition yielded significantly lower positivity (M = 0.34, SD = 1.15) than in the control condition (M = 0.70, SD = 1.14), F(1, 148) = 4.66, p = .033, $\eta_p^2 = .03$. Self-control was unrelated to the total positivity of the message F(1, 148) = 2.26, p = .135, $\eta_p^2 = .02$. Neither positive affect F(1, 148) = 2.91, p = .169, $\eta_p^2 = .01$, nor negative affect F(1, 148) = 0.11, p = .739, $\eta_p^2 < .01$, was related to the positivity of the message. Initial evaluations were related positively to the communicated ones F(1, 148) = 8.06, p = .005, $\eta_p^2 = .05$.

Discussion

Our findings show that self-control resource depletion can result in unwillingness to lie for the benefit of others. Though other-benefitting lies are not as strongly socially condemned compared to self-benefitting lies (Lindskold & Walters, 1983), they are still less frequent in interpersonal communication than self-benefitting lies. Selfish impulses often tempt people to lie for their own benefit and self-regulation helps to manage this motivation. The payoff associated with the other-benefitting lies compared to self-benefiting lies is lower for the self. It can be concluded that whereas people need willpower to avoid deceiving for their own benefit, they need self-control to deceive for the benefit of others.

In our experiment, we contrasted 'actual', against 'communicated' evaluations of a drawing. One might argue, however, that participants could already have been mild in their judgments (i.e. relatively positive) when reporting the initial 'actual' impression. What would this imply for the results? Importantly, the communicated response was even more positive and less negative than the initial response in the control condition, but less so in the ego-depletion condition. Thus, if participants were to some extent overly positive in their initial evaluations then this would lead to a more conservative test of the phenomenon.

It could be argued that the participants' reaction to hearing that the drawing was created by a child younger than they initially thought served as an expectancy violation. According to the meaning maintenance model, people who experience a violation of expectations are likely to behave in ways to maintain their worldviews (Heine, Proulx, & Vohs, 2006). One manifestation of this tendency is to blame an innocent victim in order to protect beliefs in a just world (Loseman & van den Bos, 2012). This response is particularly strong under ego-depletion condition (Loseman & van den Bos, 2012). Could it be that expectancy violation leads to less positive attitudes towards the child? We consider this somewhat unlikely. After finding out that that the child was younger than participants thought, we found that participants were overall still more *positive* (and less negative) in their feedback towards the author of the drawing. We do think, however, that integrating the perspective of meaning maintenance model and dishonesty provides an exciting line of

research that may allude to potential meaning-regulation implications of dishonesty, ideally using behavioral measures.

It is beyond the scope of this article to adjudicate whether other-benefitting lies are purely other-benefitting and no self-benefit is involved. Researchers argue that long-term personal benefits can exist in altruistic behavior (e.g. Cialdini, Schaller, Houlihan, Arps, Fultz, & Beaman, 1987). Moreover, one could argue that having access to true but potentially painful feedback regarding one's performance can be beneficial in the long run, as it allows the performer to improve their skills or not waste their time on activities that are unlikely to have positive outcomes. Importantly, however, limited self-control typically reduces the appeal of long-term outcomes (e.g., improvement, reward in the future) in favor of short-term benefits (e.g., sparing the other's feelings; immediate benefits, e.g. Baumeister, 2002).

This research is first to show that ego-depletion can *reduce* dishonesty when it is aimed at bringing benefits to another person. There are important implications of our findings. First, it provides insight into the relationship between ego-depletion and dishonesty, showing that ego-depletion not always increases dishonesty. These results also contribute to the existing knowledge on ego-depletion and self-regulation by indicating that some acts of dishonesty require self-control efforts. Counter intuitively, research shows that telling a prosocial lie is perceived as more moral than telling the truth (Levine & Schweitzer, 2014). In that sense, our results are consistent with the notion that the 'moral muscle' of ego-depletion stands on guard of what is perceived as moral behavior, even if the latter involves lying. Second, in line with previous findings (DeWall, Baumeister, Gailliot, & Maner, 2008; Xu, Begue, & Bushman, 2012), our results broadly confirm that people are less willing to engage in other-benefitting activities when ego-depleted. Third, our findings provide a fundament for further research on the types of dishonesty and self-control resource involvement. Research on ego-depletion and lying detection showed that people are worse at lie detection when selfcontrol resources are limited (Reinhard, Scharmach, & Stahlberg, 2013), and it would be interesting to see whether this relationship holds true regardless of the type of lie.

Finally, the finding that ego-depletion affects other-benefitting lies in a different way than self-benefitting lies offers a range of practical implications. For example, whereas taxing

self-control may impede truth telling in legal contexts where people lie to protect themselves, reducing self-control resources may potentially increase truthfulness when people lie to protect others. Moreover, in contexts where learning from an unpleasant truth is valued, such as in academic feedback processes or high stake decision making, taxing self-control may make people more likely to provide honest feedback, potentially contributing to long-term outcomes.

References

- Ackert, L.F., Church, B.K, Kuang, X. & Qi, L. (2011). Lying: An experimental investigation of the role of situational factors. *Business Ethics Quarterly*, *21*, 605-632.
- Baumeister, R.F. (2002). Yielding to Temptation: Self-Control Failure, Impulsive Purchasing, and Consumer Behavior. *Journal of Consumer Research*, 28, 4, 670-676.
- Baumeister, R. F., Vohs, K. D., & Tice, D. M. (2007). The strength model of self-control. *Current Directions in Psychological Science*, 16, 351-355.
- Baumeister, R. F., Bratslavsky, E., Muraven, M., & Tice, D. M. (1998). Ego depletion: is the active self a limited source? *Journal of Personality and Social Psychology*, 74, 1252-1265.
- Baumeister, R. F., & Exline, J. J. (1999). Virtue, personality, and social relations: Self-control as the moral muscle. *Journal of Personality*, 67, 1165-1194.
- Cialdini, R. B., Schaller, M., Houlihan, D., Arps, K., Fultz, J., Beaman, A. L. (1987). Empathy-based helping: Is it selflessly or selfishly motivated? *Journal of Personality* and Social Psychology, 52, 749-758.
- DePaulo, B. M., Kashy, D. A., Kirkendol, S. E., Wyer, M. M., & Epstein, J. A. (1996). Lying in everyday life. *Journal of Personality and Social Psychology*, *70*, 979-995.
- DeWall, C. N., Baumeister, R. F., Gailliot, M. T. & Maner, J. K. (2008). Depletion makes the heart grow less helpful: helping as a function of self-regulatory energy and genetic relatedness. *Personality and Social Psychology Bulletin, 34*, 1653-1662.
- Ekman, P. (1985). *Telling lies. Clues to deceit in the marketplace, politics and marriage.* New York: Norton.
- Erat, S., & Gneezy, U. (2011). White lies. Management Science, 58, 723-733.
- Gino, F., Schweitzer, M.E., Mead, N.L., Ariely, D. (2011). Unable to resist temptation: How self-control depletion promotes unethical behavior. *Organizational Behavior and Human Decision Processes*, 115, 119-203.
- Gneezy, U. (2005). Deception: The role of consequences. American Economic Review, 95, 384-394.

- Heine, S.J., Proulx, T., Vohs, K.D. (2006). The Meaning Maintenance Model: On the coherence of social motivations. *Personality and Social Psychology Review*, 10, 2, 88-110.
- Inglehart, R., Basañez, M., Moreno, A.(1998). *Human Values And Beliefs. A cross-cultural sourcebook: political, religious, sexual and economic norms in 43 societies.* The University of Michigan Press.
- Levine, E.E., & Schweitzer, M.E. (2014). Are liars ethical? On the tension between benevolence and honesty. Journal of Experimental Social Psychology, 53, 107-117.
- Lindskold S., Walters P.S., (1983). Categories for acceptability of lies. *Journal of Social Psychology*, 120, 129-136.
- Loseman, A., Van den Bos, K. (2012). A self-regulation hypothesis of coping with an unjust world: Ego-depletion and self-affirmation as underlying aspects of blaming of innocent victims. *Social Justice Research*, 25, 1-13.
- Lundquist, T., Ellingsen, T., Gribbe, E., Johannesson, M. (2009). The Aversion to Lying, Journal of Economic Behavior and Organization, 70, 81-92.
- Mazar, N., & Ariely, D. (2006). Dishonesty in everyday life and its policy implications. Journal of Public Policy & Marketing, 25, 117-126.
- Mazar, N., Amir, O., & Ariely, D. (2008). The dishonesty of honest people: A theory of selfconcept maintenance. *Journal of Marketing Research*, 45, 633-644.
- Mead, N. L., Baumeister, R. F., Gino, F., Schweitzer, M. E., & Ariely, D. (2009). Too tired to tell the truth: Self-control resource depletion and dishonesty. *Journal of Experimental Social Psychology*, 45, 594-597.
- Miller, G. R., & Stiff, J. B. (1993). *Deceptive communication*. Newbury Park: Sage.Muraven,
 M., & Baumeister, R. F. (2000). Self-regulation and depletion of limited resources:
 Does self-control resemble a muscle? *Psychological Bulletin*, 126, 247-259.
- Muraven, M., Tice, D. M., & Baumeister, R. F. (1998). Self-control as a limited resource:
 Regulatory depletion patterns. *Journal of Personality and Social Psychology*, 74, 774-789.

- Reinhard, M.A., Scharmach, M., Stahlberg, D. (2013). Too exhausted to see the truth: ego depletion and the ability to detect deception. *British Journal of Social Psychology*, 52, 4, 618-630.
- Schweitzer, M. E., Hershey, J. C., Bradlow, E. T. (2006). Promises and lies: Restoring violated trust. *Organizational Behavior and Human Decision Processes*, *101*(1), 1-19.
- Shalvi, S., Handgraaf, J.J., De Dreu, C. K. W. (2011). Ethical manoeuvring: Why people avoid both major and minor lies. *British Journal of Management*, 22, 16-27.
- Tangney, J. P., Baumeister, R. F., & Boone, A. L. (2004). High self-control predicts good adjustment, less pathology, better grades, and interpersonal success. *Journal of Personality*, 72, 271-324.
- Watson, P., Clark, L. A., & Tellengen, A. (1988). Development and evaluation of brief measures of positive and negative affect. The PANAS Scales. *Journal of Personality* and Social Psychology, 54, 1063-1070.
- Xu, H., Begue, L., Bushman, B.J. (2012). Too fatigued to care: Ego depletion, guilt, and prosocial behavior. *Journal of Experimental Social Psychology*, *48*, 1183-1186.