

**More Ways to Cheat –
Expanding the Scope of Dishonesty**

Nina Mazar
University of Toronto, 105 St. George Street, Toronto, ON M5S3E6,
phone: 416-946-5650, fax: 416-978-5433, nina.mazar@utoronto.ca

On Amir
University of California San Diego, Otterson Hall, 9500 Gilman Drive,
MC 0553, La Jolla, CA 92093-0553, phone: 858-534-2023, fax: 858-534-0745,
oamir@ucsd.edu

Dan Ariely*
Duke University, One Towerview Road, Durham, NC 27708
phone: 919-660-7703, fax 919-681-6246, dandan@duke.edu

Keywords: Honesty, Decision Making, Policy, Self

In our paper on the dishonesty of honest people (Mazar, Amir, and Ariely 2008) we proposed a theory of self-concept maintenance that allows people, who consider themselves as honest human beings and have very high beliefs in their own morality, to cheat “a little bit.” Financially benefiting from their dishonesty without paying a cost involved in “recognizing” themselves as being dishonest, and therefore without altering their self-image. The result is a substantial amount of mostly “honest” people. This is the pessimistic way of looking at our results. The optimistic perspective is that our participants did not cheat enough (i.e. as much as standard economics would predict)! That is, even when there were no external consequences to cheating, and even when the amount that they could gain were substantial they did not cheat much.

The general idea behind the theory of self-concept maintenance is that there is a range of dishonesty within which people do not have to confront the true meaning or implications of their actions. While our experimental evidence support our theory, we agree with Monterosso and Langleben (2008) that a necessary next step is to find ways to distinguish, at the process level, between dishonesty based on explicit trade-off of external costs and benefits and the self-concept maintenance idea we propose (see also Wirtz and Kum 2006). In this regard, we suspect that Neuroimaging research could prove useful (although we also feel obliged to mention that Amos Tversky used to say that the main finding of Neuroimaging is that people think with their brains), but to achieve this goal would require a different research methodology than the one we used in the studies presented. In particular, instead of confronting participants with a one-shot game in which there is only one opportunity to be dishonest and participants need to decide whether and to what extent to cheat, a Neuroimaging experiment requires multiple

decision-making trials in each of which a participant would have to face the dilemma of benefiting from dishonesty or acting honestly.¹

One approach to such a multiple-trial type of experiment is to use the “dots-game” that we recently developed to investigate the dynamics of people's decisions to cheat over time (Mazar and Ariely 2008). The procedure is very simple and it involves a computer-based task in which participants see a box divided by a diagonal line, with 20 small dots inside the box. On each trial the dots are presented for only 1 second, after which they disappear and participants are asked to indicate whether there were more dots in the left half of the box or in the right half of the box. Once the response is made, a new trial appears and this goes on for a while. While the task explicitly asks participants to indicate on which side there are more dots, the payment in this design is such that it tempts participants to indicate that there are more dots on the right side. That is, a participant gets higher payoffs (5 ¢) for every trial when she correctly or incorrectly identifies that the box has more dots on the right side (similar to the situations physicians face), and lower payoffs (0.5 ¢) when she correctly or incorrectly identifies that the box has more dots on the left side. By creating this asymmetric payment, the task essentially represents a conflict of interest, where the main task of telling the truth sometimes stands in opposition to the financial incentives physicians encounter on a daily basis.

The results of a few experiments with this paradigm revealed two main findings: First, participants cheat when they have the incentive and opportunity to do so. More importantly, when plotting participants' behavior over the course of the entire experiment (100 trials), at some point almost all participants switch to a response strategy in which they cheat in every trial. This latter observation suggests that people who consider

themselves as honest, try to limit their cheating over multiple temptations to cheat, which is why they only cheat once in awhile in the early stages of the experiment and presumably this behavior is not posing any threat to their self-concept. If, however, they overstretch the tolerance of their self-concept they create a new situation in which they have to face their own dishonesty, which in turn causes them to give up and cheat all the way –a phenomenon similar to the “What-the-Hell”-effect in the domain of dieting (Polvy and Herman, 1985; Baumeister and Heatherton, 1996).

These results suggest that a Neuroimaging experiment could be useful to distinguish between different phases of the process. For example, a functional Magnetic Resonance Imaging (fMRI) technique could deliver further support for the different types of dishonesty we observe in the dot experiment. In particular, it could help determine whether there are different areas of the brain involved in the early trials (where there is a conflict between the temptation to be dishonest and the benefits of keeping a positive self-concept), the trials where individuals switch to a new strategy, and the final stage in which individuals adopt a different strategy and cheat continuously. Such knowledge could also be crucial in discerning the different mechanisms involved in different types of deception as well as in self-deception.

A second way in which we would like to expand our understanding of dishonesty is by incorporating the perspective proposed by Rick and Loewenstein (2008). In our basic theory of self-concept maintenance we emphasize the role of two distinct but interrelated mechanisms: categorization and attention to one’s moral standards. We hypothesize that for certain types of actions and magnitudes of dishonesty, people can categorize their actions in more compatible terms and find rationalizations for them. As a

consequence people can cheat while avoiding any negative self-signals that might affect their self-concept, and thus avoid negatively updating their self-concept altogether (Gur and Sackeim 1979). Whereas the categorization mechanism depends heavily on the external world in terms of the type of exchange, the objects in question etc, the attention to standards mechanism relies on salience.²

Rick and Loewenstein (2008) emphasize the role of motivation as another important factor. In particular they point to two sources of motivation for dishonesty: competition and avoidance or recoup of losses. Motivation can influence people's dishonesty in two major ways. First, motivation to get oneself "out of a hole" can increase people's propensity for self-serving categorization, thereby increasing self-concept maintenance dishonesty. At the same time, however, it can also have a direct effect on dishonesty via standard rational dishonesty. In particular, it can lead to a point where the perceived external costs and benefits of dishonesty trump any considerations of maintaining an honest self-image; at this point individuals may carry out dishonest acts consciously and deliberately.

An extended framework for dishonesty that considers the three different mechanisms of categorization, attention, and motivation is depicted in Figure 1. While these mechanisms are not independent from each other, Mazar and Ariely (2006) have pointed out that making the right policy recommendations to curb dishonesty requires the identification of the mechanism that is driving dishonesty in a particular situation.

--- Insert Figure 1 Here ---

If the cause for dishonesty lies mainly in motivation and standard rational dishonesty (i.e., dishonesty stemming from an explicit analysis of external cost and benefit), the benefits of being dishonest must be greater than its costs. The solution then is to shift the imbalance such that the costs become greater than the benefits. This can be achieved by the standard legal approach of controlling the external costs: increasing either the probability of being caught or the severity of the punishment. Good examples for this approach are the introduction of governmental task forces, such as the Department of Justice's task force on intellectual property, which, among other combat strategies, invests in increasing the number of specially trained prosecutors. The same is true for the IRS's increase in audits and the music industry's aggressive increase in filing lawsuits against individual deceivers.

Recent evidence suggests that the probability of punishment is more important than increasing the severity of the punishment (Nagin and Pogarsky 2003). Based on this finding there might be ways to increase the effectiveness and efficiency of standard measures accordingly. Informing the important question of what is the optimal probability for deterrence, research by Barkan, Zohar, and Erev (1998) suggests that the best approach is eliminating the probability of being caught altogether, that is, moving to nonprobabilistic punishments (see also Erev et al. 2003). According to this perspective, a person who expects that driving through a red light would involve a \$500 fine in 5% of the cases is more likely to drive through it than a person who has the same expected value but with certainty of being caught (i.e., a definite \$25 fine). More important, over time, the person in the probabilistic punishment setting is going to discount the probability of the punishment further (as long as he or she is not caught), which in turn will lead to an

even greater tendency for violation. Eliminating the probabilistic component from all undesirable behaviors is impossible, but it is clear that there are some cases (e.g., driving through an intersection at a red light) in which this is possible and desirable.

A less common approach for fighting standard rational dishonesty is to decrease the benefits of dishonesty and to help people deal with their losses such that they do not feel trapped “in a hole.” This theory implies that measures such as debt consolidation and credit counseling might prove successful.

If the cause for dishonesty is inattention to moral standards, however, implementing contextual cues at the point of temptation might prove much more effective. For example, the IRS could slightly change its forms by asking people to sign an honor code statement before filling out their tax forms or by making them more personal. Another variation worth trying might be to include a survey that asks tax payers questions such as how much they care about their country, how important honesty was to their parents, how many people they think lie on their taxes, or what the typical profile is of tax evaders.

If dishonesty is mainly driven by categorization, the challenge is to decrease the malleability of actions or to give people less room for various interpretations by increasing transparency. For example, in order to decrease employee theft of office supplies, companies could place salient monetary values on these office supplies. In another example targeting the accounting profession, Bazerman, Loewenstein, and Moore (2002; see also Bazerman and Loewenstein 2001) suggest passing laws or enforcing standards that bar auditors from offering both consulting and tax services to clients in order to decrease deceptive audits. ,

Finally, it is also clear that dishonesty is complex and driven by many factors, including the cultural norms and the strengths of one's own moral standards. For example, in a recent study on the influence of cultural norms and legal enforcement in controlling corruption, Fisman and Miguel (2008) found that diplomats from high corruption countries accumulated significantly more unpaid parking violations. Together with other observations, such studies suggest that societies cannot under-invest in their educational efforts to strengthen the internalization of moral standards to make them part of their cultural norms. This basic premise requires the consideration of key questions such as how can this best be done, is there a critical age period for the internalization of such standards (as in language and visual development), what should be the limits of such efforts, and should societies allow all ideologies to participate in the creation of internal standards? In addition, the consideration of self-concept maintenance also suggests that the theory of optimal punishment (optimal punishment trades off the benefits of deterrence and the cost of punishing innocent people) should be reconsidered. If the punishment magnitude is determined in a way that makes the costs slightly higher than the benefits and if these costs also include internal standards, the optimal punishment will be lower by that amount. For example, if the expected benefit for a particular crime is Y and the internal reward for honesty is X , the standard rational model would prescribe a punishment with an expected magnitude of $-(Y + \epsilon)$, whereas the model that includes internal rewards would prescribe $-(Y + \epsilon) + X$. The complexity is that not everyone has the same level of internal standards, and to the degree that these are unobservable, it is difficult to assess the true level of optimal punishment (though it is possible that someday there will be a test for this). Conversely, signs of repeated criminal behavior, for example,

can be taken as an indication for a lower level of internalized standards, causing the magnitude of X to be updated as lower. This type of framework, in which X is an individual variable, has the potential to help build a theory of repeated punishment with the same desired principles of optimal punishment but with more effectiveness (i.e. a logical guideline for the magnitude of these policies).

In summary, there is no doubt that dishonesty is prevalent in daily life. In order to increase the effectiveness and efficiency of measures to prevent dishonesty it is vital to understand which of the distinct mechanisms is underlying the behavior in a particular situation.

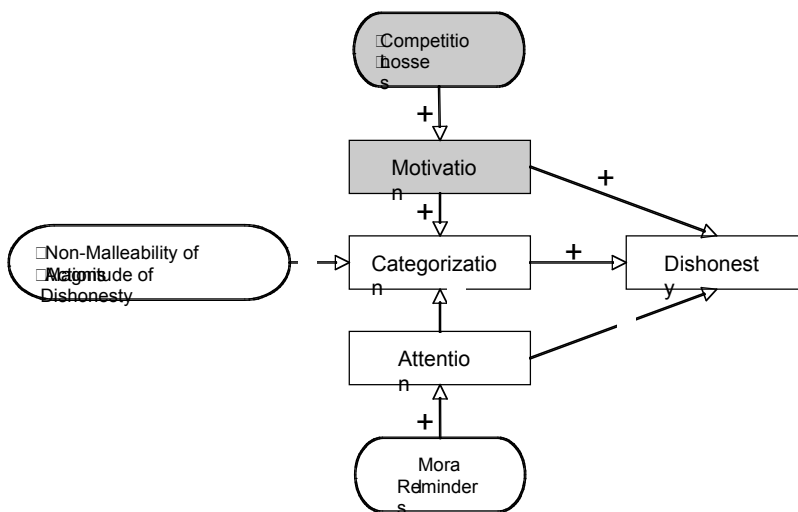


Figure 1: An Extended Framework for Dishonesty

References

- Baumeister, Roy F. and Todd F. Heatherton (1996), "Self-Regulation failure: An overview," *Psychological Inquiry*, 7 (1), 1–15.
- Barkan Rachel, Dov Zohar, and Ido Erev, (1998), "Accidents and Decision Making Under Risk: A Comparison of Four Models," *Organizational Behavior and Human Decision Processes*, 74 (2), 118–44.
- Bazerman, Max H. and George Loewenstein (2001), "Taking the Bias Out of Bean Counting," *Harvard Business Review*, 79 (1), 28.
- , ———, and Don A. Moore (2002), "Why Good Accountants Do Bad Audits," *Harvard Business Review*, 80 (11), 96–102.
- Erev, Ido, Paul Ingram, Ornit Raz, and Dror Shany (2003), "On the Possibility of Gentle Rule Enforcement," working paper, Department of Industrial Engineering and Management, Technion.
- Fisman, Ray and Edward Miguel (2008), "Corruption, Norms, and Legal Enforcement: Evidence from Diplomatic Parking Tickets," *Journal of Political Economy*, forthcoming.
- Gur, Ruben C. and Harold A. Sackeim (1979), "Self-Deception: A Concept in Search of a Phenomenon," *Journal of Personality and Social Psychology*, 37 (2), 147–69.
- Mazar, Nina and Dan Ariely (2006), "Dishonesty in Everyday Life and its Policy Implications," *Journal of Public Policy and Marketing*, 25 (1), 117–26.
- Mazar, Nina and Dan Ariely (2008), "Temporal Influences on Cheating Behavior: The "What the Hell" Effect," working paper, MIT Sloan School of Management.
- Mazar, Nina, On Amir, and Dan Ariely (2008), "The Dishonesty of Honest People: A Theory of Self-Concept Maintenance," *Journal of Marketing Research*, 45 (December) XXXX.

- Monterosso, John R. and Daniel D. Langleben (2008), "Homo Economicus' Soul," *Journal of Marketing Research*, 45 (December), XXXX.
- Nagin, Daniel S. and Greg Pogarsky (2003), "An Experimental Investigation of Deterrence: Cheating, Self-Serving Bias, and Impulsivity," *Criminology*, 41 (1), 501–527.
- Polvy, Janet and C. Peter Herman (1985), "Dieting and Binging," *American Psychologist*, 40 (2), 193–201.
- Rick, Scott and George Loewenstein (2008), "Hypermotivation," *Journal of Marketing Research*, 45 (December), XXXX.
- Wirtz, Jochen and Doreen Kum (2004), "Consumer Cheating on Service Guarantees," *Journal of the Academy of Marketing Science*, 32 (2), 159–75.

FOOTNOTES:

1. Moreover, care should be given to successfully convincing participants that their dishonesty may go unnoticed.
2. The two mechanisms are somewhat related. For example, more salient moral standards could also make it harder to categorize behavior as not pertaining to morality.