

Treating ethics as a design problem

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abstract

Creating policies that encourage ethical behavior requires an accurate understanding of what drives such behavior. We first describe three common myths about the psychological causes of ethical behavior that can lead policymakers to overlook constructive interventions. These myths suggest that ethical behavior stems from a person's beliefs; changing behavior therefore requires changing beliefs. Behavioral science, however, indicates that the immediate context (such as an organization's norms and accepted procedures) exerts a surprisingly powerful influence on behavior. To be effective, policies must treat ethics as a design problem; that is, policymakers should create contexts that promote ethical actions. We then discuss three psychological processes that affect ethical activity—attention, construal, and motivation—and describe how understanding them can help policymakers in the public and private sectors design environments that promote ethical behavior.

Epley, N., & Tannenbaum, D. (2017). Treating ethics as a design problem. *Behavioral Science & Policy*, 3(2), 73–84.

Core Findings

What is the issue?

Policymakers commonly believe that they must first change people's beliefs in order to encourage them to adopt ethical behavior. Beyond trying to change beliefs, policymakers should also treat ethics as an environmental problem and design solutions that leverage three key psychological processes: *attention, construal, and motivation*.

How can you act?

Selected recommendations include:

- 1) Designing compensation strategies with prosocial goals in mind, such as tying an individual team member's bonus to group performance
- 2) Counteracting cognitive limitations by engaging *cognitive repair* practices such as reminders, checklists, and visible statements

Who should take the lead?

Leaders and policymakers in organizational design and human resources, behavioral science researchers, organizational psychologists

Effective policy design involves shaping human behavior. In the public sector, policymakers try to encourage some behaviors and discourage others using tools such as taxes, subsidies, mandates, bans, and information campaigns. In the private sector, policymakers try to shape behavior with tools such as hiring, firing, compensation, and operations. Policymaking therefore involves psychology—specifically, policymakers' beliefs about which levers are most effective for changing behavior. Well-intended policies can be ineffective when based on erroneous beliefs about human behavior.

Examples of failed policies based on flawed assumptions are commonplace. In 2009, for instance, the Transportation Security Administration trained more than 3,000 employees to read subtle verbal and nonverbal cues, assuming that lies would "leak out" in brief interactions. In fact, psychologists find very few reliable cues to detecting deception during ongoing interactions, and this TSA program produced a 99% false alarm rate when evaluated by the Government Accountability Office.¹ And in 2001, the U.S. government distributed \$38 billion in tax rebates as part of an economic stimulus plan, based on the belief that people would spend more money when they had more to spend.^{2,3} In fact, consumer spending is guided by a host of subjective evaluations about the source and meaning of money. In this case, people overwhelming saved these rebates, creating little or no short-term stimulus,³ possibly because people interpreted the rebates as returned income rather than a windfall.⁴

Unfortunately, when it comes to considering ethical behavior, policymakers routinely hold imperfect assumptions. Common intuition presumes that people's deeply held moral beliefs and principles guide their behavior, whereas behavioral science indicates that ethical behavior also stems from momentary thoughts, flexible interpretations, and the surrounding social context. Common intuition treats the challenge of influencing ethical behavior as a problem of altering beliefs, whereas behavioral science indicates that it should also be treated as a design problem.

In this article, we describe three common myths about morality that can lead policymakers to design ineffective interventions for enhancing ethical behavior. We then discuss three basic psychological processes that policymakers in the public and private sectors can leverage when designing behavioral interventions (see Table 1). Understanding these processes can help policymakers create environments that encourage ethical behavior.

Of course, the very definition of *ethical behavior* can lead to disagreements and impasses before anyone even gets to a discussion about improving ethics. Here, we use the term to refer to actions that affect others' well-being. Ethical behavior contains some degree of prosociality, such as treating others with fairness, respect, care, or concern for their welfare. In contrast, unethical behavior contains some degree of antisociality, including treating others unfairly, disrespectfully, or in a harmful way. The inherent complexity of social behavior—which involves multiple people or groups in diverse contexts—is largely why the causes of ethical behavior can be so easily misunderstood in everyday life.

Three Myths About Morality

Common sense is based on everyday observation and guided by simplifying heuristics. These heuristics generally yield some degree of accuracy in judgment but are also prone to systematic mistakes. Comparing widely accepted common sense with the empirical record allows behavioral scientists to identify systematic errors and propose interventions for countering them.

Myth 1: Ethics Are a Property of People

All human behavior is produced by an enormously complex string of causes, but common sense often focuses on a single source: the person engaging in the activity.⁵ This narrow focus can lead to a simplified belief that unethical behavior is caused by unethical people with unethical personalities—rogue traders, charlatans, or psychopaths—rather than by the broader context in which that behavior occurs.

Table 1. Myths about morality

Belief in the myths below can diminish a policymaker's ability to maximize ethical behavior.

| Myth | Policy implication |
|---|---|
| <p><i>Ethics are a property of people</i></p> <p>Unethical behavior is largely due to unethical individuals rather than the broader context in which behavior operates.</p> | <p>Can lead policymakers to overestimate the stability of ethical behavior and endorse policies to identify, detain, and deter unethical individuals (for example, "rogue traders"). Such policies are unlikely to succeed whenever unethical behavior is systemic in nature (encouraged by a "rogue" culture or industry).</p> |
| <p><i>Intentions guide ethical actions</i></p> <p>Good intentions lead to ethical acts, and unethical intentions lead to unethical acts. Consequently, one should infer that unethical behavior stems from unethical intentions.</p> | <p>Can encourage policymakers to view safeguards as unnecessary for people with good intentions, impeding implementation of sensible policies to curb unethical behavior. At times, good intentions can result in unethical behavior.</p> |
| <p><i>Ethical reasoning drives ethical behavior</i></p> <p>Ethical behavior is guided by deliberative reasoning based on ethical principles.</p> | <p>Can induce policymakers to overestimate the effectiveness of ethics training programs (standard in many organizations) and underestimate the importance of contextual changes for altering behavior.</p> |

Perhaps the best-known example of this error comes from Stanley Milgram's experiments on obedience to authority.⁶ Participants in Milgram's experiments were instructed to administer increasingly severe electric shocks to another person, even to the point where participants thought the shocks might have been lethal (in fact, the "victim" was an actor who never received any shocks). When Milgram described this procedure to three different samples of people, not one person predicted that they would personally deliver the most intense electric shock possible to another person. In actuality, 65% of participants did. What makes Milgram's research so interesting is the mistaken intuition that only psychopaths or very deviant personalities would be capable of such obvious cruelty.

This myth implies that people tend to overestimate the stability of unethical behavior. Consistent with this possibility, survey respondents in one study dramatically overestimated recidivism rates—the likelihood that a past criminal would reoffend—both over time and across different crimes.⁷ The likelihood of reoffending actually drops dramatically over time, but participants believed that it stays relatively constant. Participants' responses followed a rule of "once a criminal, always a criminal," a view consistent with the myth that ethical behavior is a stable property of individuals.⁸ Likewise, employers

who require credit checks as a precondition for employment do so because they think past defaults predict a broader tendency to engage in a wide variety of unethical behaviors (such as workplace deviance). In fact, empirical investigations have found that credit scores are, at best, weakly associated with performance appraisal ratings or termination decisions.^{9,10}

Although largely unrecognized by the public, the lack of correspondence between past and future ethical behavior is not a new insight for behavioral science. A classic study in which psychologists evaluated thousands of high school and middle school students in the 1920s found very little consistency in honesty from one situation to another.¹¹ People tend to believe that ethical behavior reflects a consistent moral character, but actual ethical behavior varies substantially across contexts.

A focus on unethical individuals leads to policies that attempt to identify, detain, and deter those individuals (for example, "rogue traders"). This approach is unlikely to succeed whenever unethical behavior is systemic in nature (for example, it occurs within a "rogue culture" or "rogue industry"). Improving ethics often requires altering the type of situation a person is in, not simply altering the type of people in a given situation.

"Improving ethics often requires altering the type of situation a person is in, not simply altering the type of people in a given situation"

Myth 2: Intentions Guide Ethical Actions

A more focused version of Myth 1 is the common-sense assumption that actions are caused by corresponding intentions: bad acts stem from bad intentions, and good acts follow from good intentions.¹² Although intentions are correlated with a person's actions, the relationship is far more complicated than intuitions suggest.

There are at least two consequences of oversimplifying the relationship between actions and intentions. First, people tend to overestimate the power of their own good intentions and, as a result, overestimate their propensity for engaging in ethical behavior.^{13,14} People predict that they will bravely confront instances of racism, sexism, and physical abuse more often than is realistic, as such predictions fall short of the bravery people in the midst of those situations actually display.^{15–17} In one experiment, for instance, 68% of women asked to anticipate how they would respond to inappropriate job interview questions posed by a male interviewer (such as "Do you have a boyfriend?") said they would refuse to answer the questions, yet none of the women did so when actually placed in that situation.¹⁷

Second, good intentions can lead to unintended unethical consequences simply because ancillary outcomes are overlooked.¹⁸ People who help a friend get a job with their employer, for example, may fail to realize that this act of ingroup favoritism also harms those outside their social network.¹⁹ Harm can therefore be done while intending to help.

Overestimating the power of good intentions can impede sensible policies to curb unethical behavior by causing people to dismiss institution safeguards as unnecessary. For instance, surveys of doctors and financial planners find that both groups think that conflict-of-interest policies are necessary for other professions but not for their own group.²⁰ When people think that they and their colleagues have good intentions and that people in their profession can be trusted to do what is right, they may unwisely view ethical safeguards as onerous and useless.

Myth 3: Ethical Reasoning Drives Ethical Behavior

Conventional wisdom suggests that ethical reasoning causes ethical action, but behavioral scientists routinely find that ethical reasoning also follows from behavior—serving to justify, rationalize, or explain behavior after it has occurred.^{21,22} People generate sensible explanations for choices they did not make,²³ invent post hoc arguments to justify prior choices,²⁴ and evaluate evidence they want to believe using a lower evidentiary standard than they apply to evidence they do not want to believe.²⁵

To the extent that policymakers exaggerate the causal power of ethical reasoning, they will also likely overestimate the power of ethics training programs (standard in many organizations) to change behavior. Indeed, a survey of over 10,000 representative employees from six large American companies found that the success of ethics or compliance programs was driven more by social norms within the organization than by the content of these training programs.²⁶

Collectively, these three myths matter because they exaggerate the degree to which ethical behavior is driven by beliefs and can therefore be improved by instilling the right values and intentions in people. Each of the myths contains some element of truth—unethical values and intentions can at times guide unethical behaviors, and reinforcing ethical principles has some value. But these myths also oversimplify reality in a way that can lead policymakers to overlook other forces in a person's immediate context that shape ethical behavior. Policymakers who realize that encouraging ethics is not just a belief

Table 2. Ethical design principles

Ask the following questions when devising systems intended to foster ethical behavior.

| Question | Policy implication |
|--|--|
| Attention: Are ethics top of mind? People have limited attention and are guided by information that is accessible, or <i>top of mind</i> , at the time a decision is made. People sometimes act unethically simply because they fail to consider the ethical implications of their behavior. | Effective systems induce people to think about ethics routinely. Examples of triggers include ethics checklists filled out before making a decision, messages that make ethical principles salient in the environment, or heuristics that can become repeated mantras for ethical action. |
| Construal: Are people asking, "Is it right?" How people behave is influenced by how they interpret—or construe—their environment. Altering the construal of an event can dramatically affect behavior by redefining what constitutes appropriate conduct. | Ethical systems encourage ethical construals. Inducing employees to ask themselves "Is it right?" rather than "Is it legal?" should lead to an increase in prosocial behavior. |
| Motivation: Are you using prosocial goals? Social incentives, such as a desire to help or connect with others, can be used to motivate behaviors that naturally align with ethical practices. | Systems that foster ethical behavior create opportunities for people to do good for others and highlight the good that others are doing to establish more ethical norms. Instead of focusing on ethical failures, organizations should call out <i>ethical beacons</i> —exemplary ethical behaviors—for others to emulate. |

problem but also a design problem can increase ethical behavior by changing the contexts in which people live and work. Here's how.

Ethical Design for a Human Mind

For systems to be effective, they must be tailored to fit the properties of their users. Policies that encourage ethical behavior should therefore be designed around three basic psychological processes that guide human behavior: attention, construal, and motivation (see Table 2). That is, policies should be designed to help people keep ethical principles top of mind (attention), encourage people to interpret and understand the ethical ramifications of their behavior (construal), and provide opportunities and incentives to pursue ethical goals (motivation).

Attention: Make Ethics Top of Mind

Attention operates like a spotlight rather than a floodlight, focusing on a small slice of all possible relevant information. Because attention is limited, decisions are guided by whatever information is most accessible at the time the decision is made. An otherwise ethical person might behave unethically simply by failing to consider the ethical implications of his or her actions.

The limited nature of attention implies that designing environments to keep ethics top of mind should increase the likelihood of ethical behavior. In one field experiment with a U.S. automobile insurance company, customers signed an honor code either before or after completing a policy-review form that asked them to report their current odometer mileage.²⁷ Drivers reported their odometer reading more honestly when they signed the honor code before reporting their mileage. This kind of simple design change keeps honesty top of mind and can have a meaningful impact on a person's actions.²⁸

An effective ethical system triggers people to think about ethics routinely. Such systems can include ethical checklists that are consulted before making a decision,²⁹ messaging that makes ethical principles salient in the environment,³⁰ or heuristics within an organization that can become repeated mantras for ethical action.³¹ Warren Buffett, for instance, asks his employees to take the "front page test" before making any important decision: "I want employees to ask themselves whether they are willing to have any contemplated act appear the next day on the front page of their local paper—to be read by their spouses, children and friends—with the reporting done by an

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Point increase in people who cooperated in a game when its name was changed from "Wall Street Game" to "Community Game"



The lost market value to a firm fined for unethical behavior relative to the fine is **\$3.08 for every \$1**

13%

Drop in mine injuries after requiring firms to report safety records in financial statements

informed and critical reporter.³² The key is to make sure that ethics are brought to mind by either well-learned heuristics or environmental triggers at the very time that people are likely to be contemplating an ethical decision.

Effective ethical systems can be contrasted with environments that obscure ethical considerations or chronically highlight goals that push ethics out of mind. Enron, for instance, famously had its stock price prominently displayed throughout the company, including in its elevators, whereas its mission statement, which highlighted ethical principles, was unmemoable, boilerplate, and prominently displayed nowhere in the company.³³

Construal: Encourage People to Ask, "Is It Right?"

If you have ever watched a sporting event with a fan of the opposing team, you know that two people can witness the same event yet see very different things. How people behave is a function of how they interpret—or construe—their environment.

To understand the power of construal, consider a simple experiment in which two participants play a simple economic game.³⁴ In this game, both players simultaneously choose to cooperate or defect. Participants can earn a moderate amount of money if both opt to cooperate, but each player has the opportunity to earn more by defecting; however, joint defection leaves both players worse off than if both had cooperated. This task models a common tension in real-world exchanges between cooperation and exploitation. Yet simply changing the name of the game while keeping all other aspects identical (including monetary payoffs) had a dramatic impact on cooperation rates. Roughly 30% of participants cooperated when it was called the Wall Street Game, whereas 70% cooperated when it was called the Community Game. Although a name may seem like a trivial detail, altering the construal of an event can dramatically affect behavior by redefining appropriate or expected conduct for oneself and others.

At times, organizations seem to exploit the power of construal to deter ethical behavior. For instance, in the midst of serious vehicle safety concerns at General Motors, company representatives actively encouraged employees to avoid ethical interpretations of the safety issues when communicating with customers. In one illustrative case, materials from a 2008 training seminar instructed employees on euphemisms to replace ethically relevant terms when conversing with customers.³⁵ Instead of using the word *safety*, employees were to say, "has potential safety implications." Instead of terms with clear moral implications, employees were to use technical terminology, saying that a product was "above specifications" or "below specifications" rather than "safe" or "unsafe." Such instructions make it easier for employees to construe their behavior in ways that permit unethical behavior.

Failing to emphasize ethical construals is also where well-intentioned programs meant to ensure compliance with laws and regulations can go wrong in organizations. These programs usually focus on whether an action is legal or illegal, not whether it is ethically right. Encouraging employees to ask themselves "Is it legal?" rather than "Is it right?" could inadvertently promote unethical behavior. Andy Fastow, former chief financial officer of Enron, highlighted this disconnect when he looked back on his own acts of accounting fraud: "I knew it was wrong. . . . But I didn't think it was illegal. I thought: That's how the game is played. You have a complex set of rules, and the objective is to use the rules to your advantage."³⁶ As he remarked in a presentation, "The question I should have asked is not what is the rule, but what is the principle."³⁷ To foster ethical behavior, systems need to encourage ethical construals.

Motivation: Use Prosocial Goals

A truism of human behavior is that people do what they are incentivized to do. The challenge is to understand the specific goals that people hold at any given time and use the right kinds of incentives to shape behavior.

"sales employees performed better after receiving a bonus to be spent on another member of their team than they did after receiving a bonus meant to be spent on themselves"

The most common approach to motivating behavior, including ethical behavior, is to provide material incentives. Although financial rewards and punishments can be productive under the right circumstances, an approach based on extrinsic incentives alone presumes that people lack meaningful prosocial motivation to begin with: to be encouraged to behave ethically, they must be compensated in some way beyond having the satisfaction of doing the right thing.

This presumption is often unwarranted. Prosocial motives, such as a desire to help or connect with others, can be used to encourage behaviors that naturally align with ethical practices. In one experiment, fundraisers at a university alumni call center worked significantly harder and raised significantly more money after having a short question-and-answer session with a beneficiary.³⁸ In another experiment, sales employees performed better after receiving a bonus to be spent on another member of their team than they did after receiving a bonus meant to be spent on themselves.³⁹ Finally, a field experiment asking one group of managers to perform random acts of kindness for employees over a 1-month period found significant reductions in depression rates among these managers 4 months after the intervention ended.⁴⁰

The importance of social motivation can also be seen in the surprising power of social norms to shape behavior. Behavioral science repeatedly demonstrates that people mostly conform to what others around them are doing.⁴¹ This insight can be used to motivate people for good, to the extent that ethical norms are highlighted.⁴² For example, in an effort to increase tax compliance, the UK Behavioral Insights Team (at the time, a division of the British government devoted to applying behavioral science to social services) sent delinquent taxpayers letters with different messages encouraging them to pay their taxes. The most effective letter was the

one informing individuals that "Nine out of ten people in the UK pay their tax on time. You are currently in the very small minority of people who have not paid us yet."⁴³

The power of social norms in shaping ethical behavior has an important implication. Discussions about ethics often focus on unethical behavior—on crimes and other unethical things people are doing. Such discussions are like black holes, attracting people to them and potentially encouraging similar behavior. What is more constructive is to focus on ethical beacons—examples of admirable behavior among individuals, groups, or companies. Public service announcements, company newsletters, and other sources of information intended to encourage ethical behavior should call out exemplary ethical behavior that others can strive to emulate. To foster ethical behavior, then, policymakers should create opportunities for people to do good for others and should establish ethical norms by highlighting the good that others are already doing.

An Ethical Organization, by Design

An ethical system is an environment designed to keep ethics top of mind, make ethics central to the framing of policies and initiatives, and increase prosocial motivation. Design details must be guided by an organization's mission and by a well-crafted mission statement that features a small number of key principles. Practices, in turn, should be aligned with the stated principles as part of an organization's strategy for success. These principles must go beyond maximizing short-term shareholder value to focus, instead, on enabling long-term sustainability of the entity and its ethical actions.

Of course, policy changes inspired by an organization's core values will not produce a perfectly ethical organization, just as a well-designed

bridge based on fundamental engineering principles cannot eliminate all safety risks. Ethical systems are intended to create the kind of environment that makes ethical behavior easier and therefore more frequent. At a practical level, policymakers can incorporate ethical design principles into the major drivers of behavior within their organizations: procedures for hiring and compensating employees, maintaining the entity's reputation, and carrying out day-to-day operations.

Hiring

Interviews are typically meant to identify the best person for a job, although their ability to do so is notoriously limited.^{44,45} Interviews and onboarding procedures can, however, also serve as an acculturation tool that communicates an organization's ethical values to prospective employees and highlights the importance of those values to current employees.

Interviews can be designed around ethics by asking questions that make an organization's commitment to ethics clear to prospective employees. Johnson & Johnson, for instance, has a number of questions relating to its well-known credo (which pledges to prioritize the needs of the people it serves) that are put to potential employees during the interview process. For example, when discussing the company's commitment to customers, interviewers may ask potential employees to describe a time they identified and addressed an unmet customer need. Interviews designed around an organization's principles, including its ethical principles, can bring ethics to everyone's attention, encourage construal of behavior in terms of ethical principles, and signal that the organization considers ethical behavior to be an important source of motivation for both current and new employees. Even though job interviews may be poor tools for identifying and selecting the right employees, they can be used to communicate a company's values at a critical point in an employee's acculturation process. An organization that has its representatives ask about ethics during an interview signals its concern for ethics on the job.

Compensation

Organizations can design financial reward systems to encourage ethical behavior in two different ways. First, organizations can reward ethical behavior directly, such as through scorecards that translate ethical values into measurable actions. Southwest Airlines, for instance, designs its executive compensation scorecard around the company's four primary values. To reward executives for upholding the value "Every Employee Matters," the airline compensates them for low voluntary turnover. By linking compensation to keeping employees at the company, Southwest tries to create an incentive for bosses to contribute to a valuable prosocial outcome.

Second, organizations can provide opportunities for employees to satisfy preexisting prosocial motivations. People tend to feel good when they are also doing good for others,^{46,47} and they also do good to maintain a positive reputation in the eyes of others.⁴⁸ Organizations can provide opportunities to satisfy both motives by allowing employees to reward one another, by facilitating random acts of kindness, or by offering employees time to engage in prosocially rewarding work that is aligned with the organization's values. In one field experiment, Virgin Atlantic rewarded its pilots for achieving a fuel-efficiency goal by giving a relatively small amount of money to the pilot's chosen charity.⁴⁹ This prosocial incentive increased pilots' reported job satisfaction by 6.5% compared with the pilots in the control condition, an increase equivalent to the observed difference in job satisfaction between those who are in poor health and those who are in good health. The good news for organizations and policymakers is that these prosocial incentives usually cost little or nothing and yet can have meaningful effects on well-being and behavior.

Reputation Management

People, including those who run organizations, care about their reputation in the eyes of others, because that reputation affects how they are treated. In one economic analysis, companies fined by the U.S. Securities and Exchange Commission for unethical behavior lost \$3.08 in market share for every \$1 they were fined,

with these larger losses coming from the reputational consequences of being identified as a lawbreaker.⁵⁰ Policymakers who are designing ethical systems can capitalize on the reputational concerns of companies and employees to foster ethical behavior. For instance, they can ensure that an organization's reputation is measured and that the results are public and transparent.

At the individual level, many organizations already conduct annual climate or culture surveys that can be used to measure perceptions of ethical behavior within the organization. Behavioral science suggests that reporting these ethical evaluations within the organization or using them as part of the performance review process is likely to increase ethical behavior among employees, so long as making unfounded accusations can be minimized (such as when an independent agency monitors violations).

The public sector can also implement policies that enhance corporate ethics. Policies that mandate public disclosure of companies' practices often directly improve ethical behavior across an entire industry. For example, the Ministry of Environment, Lands and Parks of British Columbia, Canada, publishes a list of firms that have failed to comply with existing regulations. An empirical analysis found that publishing this list of polluters had a larger impact on subsequent emissions levels and compliance status than did fines and penalties associated with noncompliance.^{51,52}

Similarly, publishing workplace safety records, thus making them more noticeable, can produce significant decreases in workplace injuries. One analysis found that a new requirement to report mine-safety records in financial statements produced an 11% drop in mine-related citations and a 13% drop in injuries.⁵³ Reputation systems have also been effective at increasing hygienic standards at restaurants⁵⁴ and adherence to clean drinking water standards by utility companies.⁵⁵ In Los Angeles, hygiene grading cards have caused restaurants to make hygiene improvements, and, in Massachusetts, requiring community water suppliers to inform consumers

"publishing this list of polluters had a larger impact on subsequent emissions levels and compliance status than did fines and penalties associated with noncompliance"

of violations of drinking-water regulations led to a reduction in violations. Policymakers typically focus on financial or legal incentives to shape behavior, but clearly reputational concerns can serve as a third powerful class of incentives.

Operations

Designed properly, daily operations can also offer opportunities to reinforce ethical values by keeping ethical considerations top of mind and making it easier to behave ethically. These goals can be facilitated by using organizational practices that compensate for cognitive limitations (that is, *cognitive repairs*), such as reminders, checklists, and visible statements relating to personal responsibility.^{56–59}

These cognitive repairs must be timely to be effective, bringing ethical considerations to mind at the time a person is making a decision with ethical implications. One field experiment highlights the importance of timeliness. In this study, hotel valets either reminded drivers to wear their seat belt when the valet ticket was turned in (about a 6-minute delay), reminded drivers to wear their seat belt as they entered the car, or provided no reminder at all.⁶⁰ Only the immediate reminders had a noticeable impact on behavior. Drivers who received the reminder 6 minutes before starting their car were no more likely to fasten their seat belts than were drivers who received no reminder at all.

Cognitive repairs must also make the ethical consequences of one's actions obvious. In one series of experiments, researchers found that

physicians were more likely to follow a standard handwashing protocol when signs at the handwashing stations reminded them about the consequences for patient safety ("Hand hygiene prevents patients from catching diseases"), compared with signs that provided instructions for handwashing or emphasized personal safety ("Hand hygiene prevents you from catching diseases").⁶¹ The goal of these design solutions is to create an environment where ethical considerations are such a routine part of day-to-day interactions that they become automatic habits ingrained in the organization's cultural practices.

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Conclusion

In writing about the 2007–2008 financial crisis, *New Yorker* reporter John Cassidy noted that he

angered some people by suggesting that . . . [the] Wall Street C.E.O.s involved in the run-up to the financial crisis were "neither sociopaths nor idiots nor felons. For the most part, they are bright, industrious, not particularly imaginative Americans who worked their way up, cultivated the right people, performed a bit better than their colleagues, and found themselves occupying a corner office during one of the great credit booms of all time."⁶²

That this statement angered so many people illustrates how conventional wisdom often treats ethics as a belief problem: that unethical behavior is caused by individuals with unethical values or intentions.

However, the empirical evidence paints a more complicated picture: Unethical behavior is also caused by momentary thoughts, interpretations, and social context. As a result, a more accurate and constructive approach for policymakers is to treat ethical behavior as a design problem. Designing environments that keep ethics top of mind, encourage ethical construals, and strengthen prosocial motivations is essential for helping to keep otherwise good people from doing bad things.

references

1. Government Accountability Office. (2013). *Aviation security: TSA should limit future funding for behavior detection activities* (GAO Publication No. 14-158T). Washington, DC: U.S. Government Printing Office.
2. Epley, N., & Gneezy, A. (2007). The framing of financial windfalls and implications for public policy. *Journal of Socio-Economics*, 36, 36–47.
3. Shapiro, M. D., & Slemrod, J. (2003). Consumer response to tax rebates. *American Economic Review*, 93, 381–396.
4. Epley, N., Mak, D., & Idson, L. C. (2006). Bonus or rebate? The impact of income framing on spending and saving. *Journal of Behavioral Decision Making*, 19, 213–227.
5. Gilbert, D. T., & Malone, P. S. (1995). The correspondence bias. *Psychological Bulletin*, 117, 21–38.
6. Milgram, S. (1965). Some conditions of obedience and disobedience to authority. *Human Relations*, 18(1), 57–76.
7. Vosgerau, J. (2016). *Accuracy of morality judgements*. Working paper, Bocconi University, Milan, Italy.
8. Maruna, S., & King, A. (2009). Once a criminal, always a criminal? "Redeemability" and the psychology of punitive public attitudes. *European Journal on Criminal Policy and Research*, 15, 7–24.
9. Bernerth, J. B., Taylor, S. G., Walker, H. J., & Whitman, D. S. (2012). An empirical investigation of dispositional antecedents and performance-related outcomes of credit scores. *Journal of Applied Psychology*, 97, 469–478.
10. Bryan, L. K., & Palmer, J. K. (2012). Do job applicant credit histories predict performance appraisal ratings or termination decisions? *The Psychologist-Manager Journal*, 15, 106–127.
11. Hartshorne, H., & May, M. A. (1928). *Studies in the nature of character: I. Studies in deceit*. New York, NY: Macmillan.
12. Baron, J., & Hershey, J. C. (1988). Outcome bias in decision evaluation. *Journal of Personality and Social Psychology*, 54, 569–579.
13. Epley, N., & Dunning, D. (2000). Feeling "holier than thou": Are self-serving assessments produced by errors in self or social prediction? *Journal of Personality and Social Psychology*, 79, 861–875.
14. Epley, N., & Dunning, D. (2006). The mixed blessings of self-knowledge in behavioral prediction: Enhanced discrimination but exacerbated bias. *Personality and Social Psychology Bulletin*, 32, 641–655.
15. Bocchiaro, P., Zimbardo, P. G., & Van Lange, P. A. M. (2012). To defy or not to defy: An experimental study of the dynamics of disobedience and whistleblowing. *Social Influence*, 7, 35–50.
16. Kawakami, K., Dunn, E., Karmali, F., & Dovidio, J. F. (2009, January 9). Mispredicting affective and behavioral responses to racism. *Science*, 323, 276–278.
17. Woodzicka, J. A., & LaFrance, M. (2001). Real versus imagined gender harassment. *Journal of Social Issues*, 57, 15–30.
18. Chugh, D., Banaji, M. R., & Bazerman, M. H. (2005). Bounded ethicality as a psychological barrier to recognizing conflicts of interest. In D. A. Moore, D. M. Cain, G. Loewenstein, & M. H. Bazerman (Eds.), *Conflicts of interest: Problems and solutions from law, medicine and organizational settings* (pp. 74–95). London, United Kingdom: Cambridge University Press.
19. Bazerman, M. H., & Tenbrunsel, A. E. (2012). *Blind spots: Why we fail to do what's right and what to do about it*. Princeton, NJ: Princeton University Press.
20. Sharek, Z., Schoen, R. E., & Loewenstein, G. (2012). Bias in the evaluation of conflict of interest policies. *The Journal of Law, Medicine & Ethics*, 40, 368–382.
21. Haidt, J. (2001). The emotional dog and its rational tail: A social intuitionist approach to moral judgment. *Psychological Review*, 108, 814–834.
22. Ditto, P. H., Pizarro, D. A., & Tannenbaum, D. (2009). Motivated moral reasoning. In D. M. Bartels, C. W. Bauman, L. J. Skitka, & D. L. Medin (Eds.), *Psychology of learning and motivation: Vol. 50. Moral judgment and decision making* (pp. 307–338). San Diego, CA: Academic Press.
23. Johansson, P., Hall, L., Sikström, S., & Olsson, A. (2005, October 7). Failure to detect mismatches between intention and outcome in a simple decision task. *Science*, 310, 116–119.
24. Haidt, J., Bjorklund, F., & Murphy, S. (2000). *Moral dumbfounding: When intuition finds no reason*. Unpublished manuscript, University of Virginia, Charlottesville.
25. Dawson, E., Gilovich, T., & Regan, D. T. (2002). Motivated reasoning and performance on the Wason selection task. *Personality and Social Psychology Bulletin*, 28, 1379–1387.
26. Treviño, L. K., Weaver, G. R., Gibson, D. G., & Toffler, B. L. (1999). Managing ethics and legal compliance: What works and what hurts. *California Management Review*, 41(2), 131–151.
27. Shu, L. L., Mazar, N., Gino, F., Ariely, D., & Bazerman, M. H. (2012). Signing at the beginning makes ethics salient and decreases dishonest self-reports in comparison to signing at the end. *Proceedings of the National Academy of Sciences, USA*, 109, 15197–15200.
28. Congdon, W. J., & Shankar, M. (2015). The White House Social & Behavioral Sciences Team: Lessons learned from year one. *Behavioral Science & Policy*, 1(2), 77–86.
29. Gawande, A., & Lloyd, J. B. (2010). *The checklist manifesto: How to get things right*. New York, NY: Metropolitan Books.
30. Meeker, D., Knight, T. K., Friedberg, M. W., Linder, J. A., Goldstein, N. J., Fox, C. R., . . . Doctor, J. N. (2014). Nudging guideline-concordant antibiotic prescribing: A randomized clinical trial. *JAMA Internal Medicine*, 174, 425–431.
31. Heath, C., Larrick, R. P., & Klayman, J. (1998). Cognitive repairs: How organizational practices can compensate for individual shortcomings. *Research in Organizational Behavior*, 20, 1–37.
32. Berkshire Hathaway. (n.d.). *Berkshire Hathaway Inc. code of business conduct and ethics*. Retrieved May 25, 2017, from <http://www.berkshirehathaway.com/govern/ethics.pdf>
33. McLean, B., & Elkind, P. (2003). *The smartest guys in the room: The amazing rise and scandalous fall of Enron*. New York, NY: Portfolio.
34. Liberman, V., Samuels, S. M., & Ross, L. (2004). The name of the game: Predictive power of reputations versus situational labels in determining prisoner's dilemma game moves. *Personality and Social Psychology Bulletin*, 30, 1175–1185.
35. United States Department of Transportation, National Highway Traffic Safety Administration. (2014, May 16). *Consent Order TQ14-001: In re: NHTSA Recall No. 14V-047*. Retrieved from <https://www.safercar.gov/sites/htsса.дот.gov/files/may-16-2014-tq14-001-consent-order.pdf>

36. Elkind, P. (2013, July 1). The confessions of Andy Fastow. *Fortune*. Retrieved from <http://fortune.com/2013/07/01/the-confessions-of-andy-fastow/>
37. Jaffe, M. (2012, March 19). Andrew Fastow draws on Enron failure in speech on ethics at CU. *The Denver Post*. Retrieved from <http://www.denverpost.com/2012/03/19/andrew-fastow-draws-on-enron-failure-in-speech-on-ethics-at-cu/>
38. Grant, A. M., Campbell, E. M., Chen, G., Cottone, K., Lapedis, D., & Lee, K. (2007). Impact and the art of motivation maintenance: The effects of contact with beneficiaries on persistence behavior. *Organizational Behavior and Human Decision Processes*, 103, 53–67.
39. Anik, L., Aknin, L. B., Norton, M. I., Dunn, E. W., & Quoidbach, J. (2013). Prosocial bonuses increase employee satisfaction and team performance. *PLoS One*, 8(9), Article e75509. Retrieved from <https://doi.org/10.1371/journal.pone.0075509>
40. Chancellor, J., Margolis, S., & Lyubomirsky, S. (2017). The propagation of everyday prosociality in the workplace. *The Journal of Positive Psychology*. Advance online publication. <https://doi.org/10.1080/17439760.2016.1257055>
41. Cialdini, R. B., & Goldstein, N. J. (2004). Social influence: Compliance and conformity. *Annual Review of Psychology*, 55, 591–621.
42. Nolan, J. M., Schultz, P. W., Cialdini, R. B., Goldstein, N. J., & Griskevicius, V. (2008). Normative social influence is underdetected. *Personality and Social Psychology Bulletin*, 34, 913–923.
43. Hallsworth, M., List, J., Metcalfe, R., & Vlaev, I. (2014). *The behavioralist as tax collector: Using natural field experiments to enhance tax compliance* (NBER Working Paper No. 20007). Cambridge, MA: National Bureau of Economic Research.
44. Wright, P. M., Lichtenfels, P. A., & Pursell, E. D. (1989). The structured interview: Additional studies and a meta-analysis. *Journal of Occupational Psychology*, 62, 191–199.
45. McDaniel, M. A., Whetzel, D. L., Schmidt, F. L., & Maurer, S. D. (1994). The validity of employment interviews: A comprehensive review and meta-analysis. *Journal of Applied Psychology*, 79, 599–616.
46. Andreoni, J. (1990). Impure altruism and donations to public goods: A theory of warm-glow giving. *The Economic Journal*, 100, 464–477.
47. Dunn, E. W., Aknin, L. B., & Norton, M. I. (2008, March 21). Spending money on others promotes happiness. *Science*, 319, 1687–1688.
48. Cain, D. N., Dana, J., & Newman, G. E. (2014). Giving versus giving in. *Academy of Management Annals*, 8, 505–533.
49. Gosnell, G. K., List, J. A., & Metcalf, R. D. (2017). *A new approach to an age-old problem: Solving externalities by incenting workers directly* (E2e Working Paper 027). Retrieved from E2e website: <https://e2e.haas.berkeley.edu/pdf/workingpapers/WP027.pdf>
50. Karpoff, J. M., Lee, D. S., & Martin, G. S. (2008). The cost to firms of cooking the books. *Journal of Financial and Quantitative Analysis*, 43, 581–612.
51. Foulon, J., Lanoie, P., & Laplante, B. (2002). Incentives for pollution control: Regulation or information? *Journal of Environmental Economics and Management*, 44, 169–187.
52. Konar, S., & Cohen, M. A. (1997). Information as regulation: The effect of community right to know laws on toxic emissions. *Journal of Environmental Economics and Management*, 32, 109–124.
53. Christensen, H. B., Floyd, E., Liu, L. Y., & Maffett, M. G. (2017). *The real effects of mandated information on social responsibility in financial reports: Evidence from mine-safety records*. Retrieved from SSRN website: <https://dx.doi.org/10.2139/ssrn.2680296>
54. Jin, G. Z., & Leslie, P. (2003). The effect of information on product quality: Evidence from restaurant hygiene grade cards. *The Quarterly Journal of Economics*, 118, 409–451.
55. Benner, L. S., & Olmstead, S. M. (2008). The impacts of the "right to know": Information disclosure and the violation of drinking water standards. *Journal of Environmental Economics and Management*, 56, 117–130.
56. Heath, C., Larrick, R. P., & Klayman, J. (1998). Cognitive repairs: How organizational practices can compensate for individual shortcomings. *Research in Organizational Behavior*, 20, 1–37.
57. Haynes, A. B., Weiser, T. G., Berry, W. R., Lipsitz, S. R., Breizat, A. H. S., Dellinger, E. P., . . . Gawande, A. A. (2009). A surgical safety checklist to reduce morbidity and mortality in a global population. *New England Journal of Medicine*, 360, 491–499.
58. Rogers, T., & Milkman, K. L. (2016). Reminders through association. *Psychological Science*, 27, 973–986.
59. Zhang, T., Fletcher, P. O., Gino, F., & Bazerman, M. H. (2015). Reducing bounded ethicality: How to help individuals notice and avoid unethical behavior. *Organizational Dynamics*, 44, 310–317.
60. Austin, J., Sigurdsson, S. O., & Rubin, Y. S. (2006). An examination of the effects of delayed versus immediate prompts on safety belt use. *Environment and Behavior*, 38, 140–149.
61. Grant, A. M., & Hofmann, D. A. (2011). It's not all about me: Motivating hand hygiene among health care professionals by focusing on patients. *Psychological Science*, 22, 1494–1499.
62. Cassidy, J. (2013, August 5). Wall Street after Fabulous Fab: Business as usual. *The New Yorker*. Retrieved from <https://www.newyorker.com/news/john-cassidy/wall-street-after-fabulous-fab-business-as-usual>