

Why we might be more moral than we think: The Importance of Emotion for Moral Action and Moral Forecasting

BY RIMMA TEPER, MICHAEL INZLICHT, ELIZABETH PAGE-GOULD

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Imagine yourself discovering a loophole in your company's financial software that would allow someone to siphon money out of corporate accounts essentially undetected. You recently found out that your youngest child needs special services and thus you will have to spend hundreds of thousands of dollars in extra education, training, and special equipment over the next few decades. Sitting in front of your computer, you realize that the only thing that separates you from embezzling your company's money is a few strokes of the keyboard. You notice your heart pounding in your chest and you are breathing fast. This opportunity to setup the heist may not occur again. What do you do? We will argue here that you may end up surprising yourself. The reason for this is that your decision to behave morally or immorally rests on the intensity of your emotional experience at the moment you decide.

In the past decade, social psychologists have explored how people decide what is morally right or wrong. This trend is not surprising, given the applicability of such research to real-life issues, such as litigation. Yet, strangely enough, little research has explored moral behavior. Social scientists, in other

words, have spent much time studying morality through individuals' moral judgments and predictions of how they might act in a moral dilemma, assuming that such measures reflect real-life moral behavior. However, classic research in social psychology indicates that attitudes and behaviors may not always align. As such, the assumption that self-reported measures of morality will translate to actual behavior is problematic for the field of litigation because moral judgments, and predictions about future behavior are constantly being made throughout the litigation process. In the study we report on here, we examined the relationship between actual moral behavior and moral forecasting (i.e., predictions of future moral behavior), while investigating internal processes that might account for any disconnect between the two. Our research rests on the hypothesis that moral action and moral judgment are different, primarily because the psychological processes that guide moral behavior are not fully engaged during moral forecasting.

The Role of Emotion in Behavior and Forecasting

Although recent research on moral decision making is of great importance, its narrow focus on judgment is problematic given that attitudes are often incompatible with behaviors,^{1,2} and many of the conclusions drawn about the nature of morality have been based on empirical studies of judgment and predicted moral behavior alone.^{3,4,5} As such, there is good reason to believe that moral behavior will deviate from moral judgment. Research on "affective forecasting," or people's ability to predict their own future emotions, indicates that individuals are not very good at predicting their emotions in future situations.⁶ If emotions play an important role in moral behavior, then limited access to these emotions while predicting moral behavior will translate to errors in this prediction. For example, research suggests that when individuals are not emotionally aroused, they have little appreciation for the role that emotion plays in motivating their behavior.⁷ This work implies that individuals have a tendency to underestimate the intensity of the emotions they will feel in real-life situations.

Related work in the field of psychophysiology specifies that emotional signals are important for effective decision making.⁸ These physiological signals are perceived as "feelings,"⁹ and individuals rely on these feelings to guide socially relevant behavior. Indeed, research confirms that emotional processes are engaged when individuals make moral judgments.¹⁰ Here, we suggest that emotional processes may be more active when people are involved in actual moral dilemmas than when they make moral judgments.

Are People More Moral Than They Think?

Neuropsychologists state that there exist primary and secondary emotional inducers.⁹ Primary inducers are stimuli that are present within the immediate environment and cause pleasure or pain (e.g., eating cake, encountering a snake, etc.). Secondary inducers are generated by recalling or imagining an emotional event (e.g., imagining eating a cake, imagining a snake, etc.). Secondary inducers are thought to simulate the physiological state associated with corresponding primary inducers, but typically at a lower level.



Even though moral emotions are present during moral forecasts,¹⁰ if these emotions are less intense than the emotions experienced during actual moral dilemmas, then individuals may underestimate the strength of their emotions when they are making predictions. And if emotions such as guilt and love drive moral behavior,¹¹ then underestimating emotion may result in moral forecasting errors; that is, people may act more morally than they might predict. We tested this hypothesis in the following study.

Overview of Results

Sixty-seven university students participated in our experiment for course credit. Physiological sensors were applied in order to detect patterns in heart rate, respiration, and sweat in the palms. Participants were then randomly assigned to one of three groups: moral action, moral forecasting, or a control group. Participants in the moral action group had to complete a math test in which they had the opportunity to cheat. This task consisted of 15 simple, but tedious, arithmetic problems (e.g., $45 + 679 + 8 + 11 + 234 + 50 - 71 - 1 - 524 - 25 = ?$). We informed participants that a “glitch” in the software would cause the answer to each question to appear on the screen when they pressed the space bar. Participants thought we had no way of knowing whether or not they pressed the space bar. We informed them that they would be rewarded with \$5.00 if they answered 10 or more questions correctly. Participants in the moral forecasting group were presented with the same 15 problems, but instead of solving the problems, they indicated whether they would reveal the answer for each question under the circumstances just described. Finally, participants in the control group had to complete the same math test, but with no option of cheating; this group allowed us to separate the emotion (measured physiologically) elicited by a moral dilemma from the emotion elicited by solving difficult math problems.

As Figure 1 demonstrates, we found that participants who actually completed the math test cheated significantly less (an average of 0.96 out of 15 questions) than did participants who had to predict how many times they would cheat (an average of 4.82 out of 15 questions). In other words, the individuals in our study cheated approximately 5 times less than their counterparts predicted they would. Next, we investigated the role of emotion in this relationship.

We hypothesized that participants who had the chance to behave immorally would exhibit greater emotionality (as measured by physiological arousal) than would participants in the two other groups. The three indices of physiological arousal that we recorded were pre-ejection period (PEP), which can be conceptualized as the strength of the heart contraction,¹² respiratory sinus arrhythmia (RSA), a measure derived from heart and respiration rates which represents parasympathetic nervous system activity,¹³

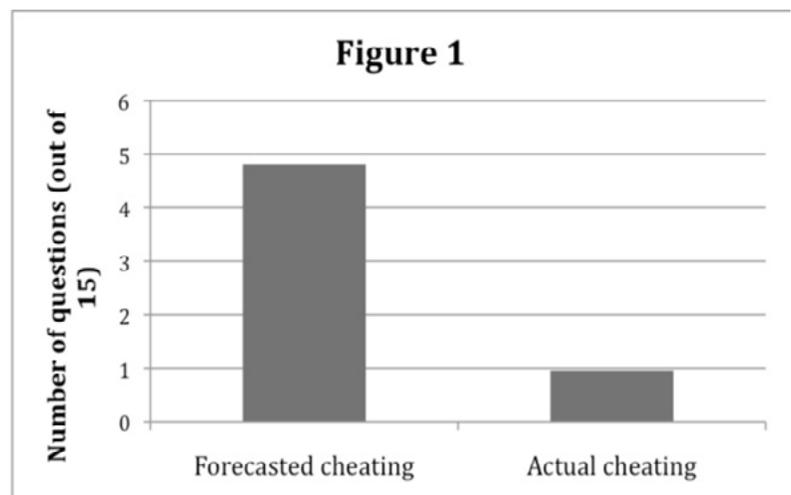


Figure 1.

The average number of times that participants in the moral action condition compared to the average number of times that participants in the moral forecasting condition predicted they would cheat in the same situation.

and skin conductance response (SCR), a measure of sweat in the palms, which is indicative of general arousal. Our results revealed that participants who had the chance to cheat on the math test, displayed greater levels of arousal on all three indices than did participants who simply had to predict whether or not they would cheat. Importantly, participants in the moral action group exhibited greater arousal than did participants who completed the math test without the option of cheating, suggesting that the arousal they felt was above and beyond any arousal that might be attributed to test-taking (see Figures 2, 3, and 4).

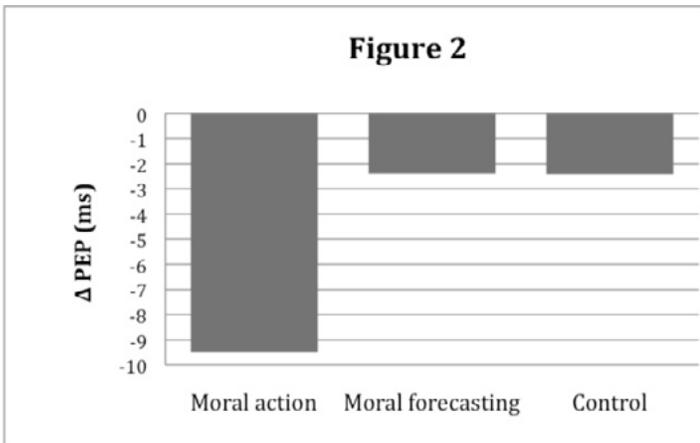


Figure 2.

Participants in the moral action condition displayed significantly stronger heart contractions, as represented by a smaller PEP, than did participants in the moral forecasting and control conditions. The graph shows mean change (arousal during math task minus arousal during resting period). The graph shows mean change (arousal during math task minus arousal during resting period).

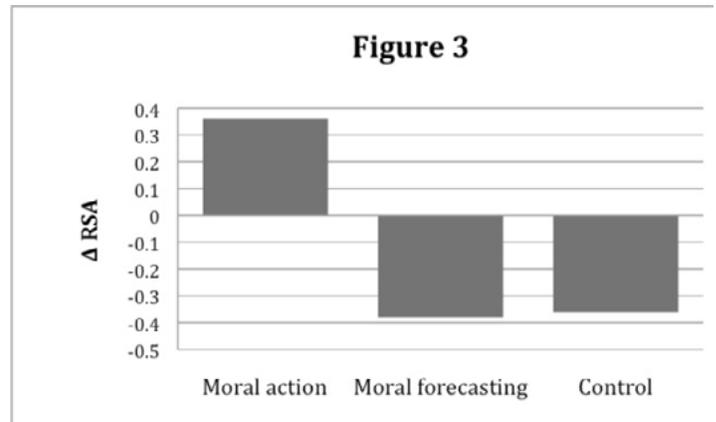


Figure 3.

Participants in the moral action condition displayed significantly greater parasympathetic nervous system activity, as represented by greater RSA, than did participants in the moral forecasting and control conditions. The graph shows mean change (arousal during math task minus arousal during resting period).

Finally we wanted to investigate the role that emotional arousal plays in the disconnect between actual cheating and predicted cheating. Statistical analyses revealed that the differences in heart and respiration rates and sweat in the palms between the action and forecasting groups were a key reason for the disconnect between actual and predicted moral behavior. In other words, it seems that the reason individuals' predictions of their behavior do not coincide with their actual behavior is because individuals predicting their behavior do not feel the intense emotions present during real-life moral dilemmas.

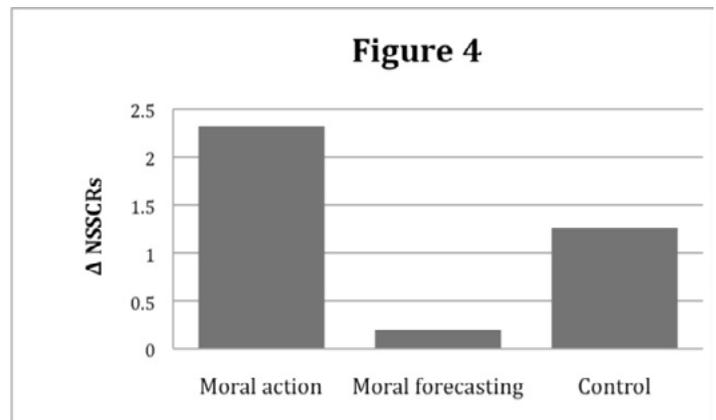


Figure 4.

Participants in the moral action condition produced significantly more sweat in their palms, as represented by the number of non-significant skin conductance responses (NSSCRs), than did participants in the moral forecasting and control conditions. The graph shows mean change (arousal during math task minus arousal during resting period).

Discussion and Implications

This research explored the relationship between moral forecasts and moral behavior as well as the internal biological and psychological processes that drive the two. We found that individuals underestimate their moral capacities (for at least the type of moral dilemma we studied). Furthermore, our results imply that people's moral forecasting errors result from the inability to access the emotional experience that occurs during real-life moral dilemmas.

This issue is directly applicable to litigation, in that jurors, by virtue of their duty, forecast, predict and imagine the behaviors of the litigants based on the evidence that is presented in the courtroom. Although the results of our study revealed that individuals underestimate their own capacity for morality when asked to predict their actions in specific moral dilemmas, they further imply that individuals make these errors because they lack the emotions that arise "in the heat of the moment." Similarly then, jurors may make inaccurate moral judgments because they may fail to appreciate the strong influence that particular emotions and affective arousal may have on the behaviors of the litigants in question.

Lawyers can use the results of the current research to their advantage by presenting relevant evidence in a way that highlights or minimizes the emotional aspects of the moral decisions pertaining to the case at hand. For instance, if the jury is presented with a case of an innocent man who is accused of stealing a vehicle, the defense attorney may attest their client's innocence by stressing the emotions that prevented him from committing the crime. Specifically, the lawyer could ask the jury to imagine the love that the defendant feels for his family whom he would be kept away from if caught and convicted of the crime, or the fear of getting caught that the defendant would feel, or possibly the impending guilt that the defendant would be faced with after having committed the crime. Such emotions serve as a moral compass,¹¹ and often prevent individuals from committing moral transgressions. Simulating the emotional experience of the defendant in this way, might be a helpful tactic for lawyers to use. By using this technique, lawyers can help the jury to put themselves in the shoes of the defendant, so to speak, and thus help them to recognize how difficult it might be to transgress.



It is important to note, however, that the current study utilized only one specific moral dilemma, in which the incentive to transgress was fairly low (\$5.00). It is quite possible, and even likely that if the incentive to cheat was higher (for instance, if we offered \$100.00 for answering 10 or more questions correctly), then the participants in our study might have actually underestimated their likelihood to cheat. In such a scenario, the emotions associated with the potential gain of \$100.00 (i.e., excitement) might overpower any "moral" emotions that the individuals would feel. As such, these gain-related emotions might dominate the decision-making process, and consequently drive the behavior. In such a scenario, the plaintiff's lawyer might benefit from thoroughly illustrating the emotions that could be associated with the defendant's incentives to commit the crime. If we imagine a woman who sells illicit drugs in order to pay for her university tuition, it is not difficult to see how the emotions associated

with being able to pay her university fees might overpower any moral emotions that might normally prevent her committing this offense. As with any moral dilemma or court case, there exist forces that pull the individual to either act morally and forces that push the individual to transgress. It seems that an important factor in determining the outcome of any specific case may be realizing which forces or emotions are likely to be stronger in that particular scenario.

As previously stated, the results of the current research do not imply that individuals always underestimate their morality. Rather, we interpret our findings to mean that individuals have a hard time forecasting the presence and intensity of their emotional states, and that this difficulty leads to inaccurate predictions. Sometimes, as in the current experiment, emotions elicited by actual situations increase moral behavior; other times, however, these emotions may undermine moral behavior. Key scenarios in which we may overestimate our moral behavior are situations where one has to act in order to behave morally. In our study, it was the immoral behavior that required action (i.e., pressing the spacebar to cheat on the math task). It is possible that intense states of bodily arousal make people freeze in the moment of a moral decision. For example, when asked whether they would save a small child from a burning car, almost everyone would say they would risk their life to do so. However, when standing in front of the burning car, the unquestionably intense experience of that moment may inhibit our ability to move and act, thus leading fewer people to save the child than they would predict.

Another more specific scenario to which the current work can be applied is the case of appealing for parole or an early release from prison. The verdicts of such cases are almost purely based on predictions of how the individual in question is likely to act upon their release. Undoubtedly, information from the defendant's past, as well as their behavior during imprisonment is used to make such decisions. However, the emotions that might play into any future decisions should not be overlooked. On a related note, the current research seems to support the introduction of emotional development programs in prisons. Past research has reliably confirmed that sociopathic criminals lack the emotional signals that are important for navigating through social interactions, and specifically moral dilemmas.¹⁴ In other words, when faced with a moral dilemma, they are likely to transgress because they lack the emotions (i.e., guilt, nervousness, shame, etc.) that steer other individuals in the right direction. As such, emotional development and awareness programs might be quite useful for cultivating the emotional sensitivity that seems to be required to make moral choices.

The finding that individuals may act more morally than they think they will is a novel one. Moreover, it seems to have interesting implications for the litigation process, and offers new insight into the deliberation process of the jury. Finally, the current research can be applied to issues closely related to litigation, such as prison programs for inmates. In sum, it seems that several law-related domains stand to benefit from the knowledge that, at least in some cases, people underestimate their moral capabilities and that emotions play a crucial role in the relationship between what we think we will do and what we actually do.

We asked two trial consultants to give their reactions to this article.
On the following pages, Ken Broda-Bahm and Tara Trask respond.

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Reasoning With Emotion from Ken Broda-Bahm, Ph.D.

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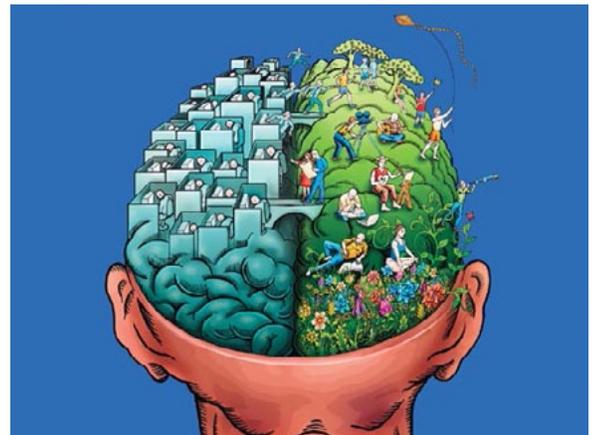
The authors of this study deserve congratulations for three things: For furthering an increasingly relevant focus on moral experience, for focusing on moral behavior rather than simply prediction, and for applying it all to the realm of litigation, where average people create and apply morality on a daily basis. It is that third area where I plan to focus my comments. Specifically, from the perspective of a litigation consultant, I would like to respond with one caution and one contribution. The caution relates to an area where the authors' suggested advice could pose a problem. The contribution relates to one additional application to trial communication that the authors did not consider.

The Caution: Take Care in Arguing from Emotion to a Jury

The main conclusion of the study is that predictions of future moral behavior tend to be weak in the abstract: When made in conditions that are divorced from the emotional experiences that tend to occur at the moment one actually decides, we can end up under-estimating the likelihood of moral action. The error occurs, they say, based on the "inability to access the emotional experience that occurs during real-life moral dilemmas". The application to litigation comes in the advice that lawyers should seek to re-connect the action to the emotion when describing, for example, a defendant's decision to commit a crime or not: "The lawyer could ask the jury to imagine the love that the defendant feels for his family who he would be kept away from if caught..."

That may make sense from the empirical context of the study results, yet it could be a dangerous strategy in practice. The problem is that jurors understand the law is a unique setting for moral judgment and they are primed repeatedly – in jury selection, pre-instruction, and opening statement – to be suspicious of emotions, to set them aside, and to prefer evidence and reason instead. So, in that context, the lawyer who stands up and invites the jury to connect with the party's feelings will be seen as making an emotional appeal, and engaging in per se inappropriate argument, a move that jurors see as the surest sign of a weak case.

Now, the social scientist will respond – rightly – that this dualism separating "reason" from "emotion" is a figment of our Cartesian imaginations. However much that is true, jurors don't see it that way, and neither does the law. That said, re-connecting emotions to actions remains an important goal, it just requires much more subtle means in legal argument. Here, the rule "show, don't tell" applies. Saying "my client has suffered terribly," will never lead to a conclusion as durable as when a juror looks at your client and decides *on their own* that they see genuine and terrible



suffering. So, instead of describing a client's emotions and asking the jurors to "put themselves into the shoes of the defendant" (a move that runs afoul of the Golden Rule objection), attorneys need to work creatively to find a permissible, natural, and most importantly, credible way to show jurors the emotional component.

The Contribution: Consider Arguing For Emotion to a Judge

The advice the authors provide focuses on the defendant as the moral agent. But the other critical context in which this research should be considered is the action of the jurors themselves. In the highest-stakes cases of all, capital cases, jurors understand that they are *acting* and not just *deciding* through their verdict, and their actions carry moral weight. In civil cases as well, jurors are very focused on the consequences of their verdict. Even in simple contract cases, the jurors that I talk to post-verdict are generally humbled by the importance of what they've done, and some even experience a fair amount of stress. Deliberation itself is an arena where jurors are forced to evaluate not just the parties, but the morality of their own actions as well.

The authors' central finding is that moral judgment can be inaccurate when it is artificially divorced from the emotional components of the decision. In the cold and abstract light of predicting one's own actions – or, in the jurors' case, evaluating another's actions – we make errors. So this study adds one argument against the tide working to drain emotion from a jury's decision making.

One application of this might be in the evidence hearing. Crime scene photos, or other evocative pieces of evidence, are often the best ways to meet the "show, don't tell" advice that I give above. But first, they often need to make it through a hearing to determine their admissibility. If one side argues that the piece of evidence is too inflammatory to be admitted, the standard is whether the evidence's prejudicial value exceeds its probative value. That is admittedly a subjective formula, and the bottom line will generally be, "Does the judge approve of the evidence?" But when you have a judge open to argument, it may be worth pointing out one assumption that this formula makes: namely that "emotional" means "prejudicial." Armed with studies like this one the attorneys seeking admission of the evidence should argue straightforwardly:

Yes, your honor, it is undeniable that this evidence elicits an emotional response. But there is no indication whatsoever that an emotional response by itself will render the jury less capable of reason. Indeed, the weight of the empirical evidence cited in my brief is that emotion is an inseparable part of reason. In order to prevail in their objection, my opposing party will need to show not that the evidence is emotional, but that it prevents the jury from reasoning clearly and completely. My argument, your honor, is that their reasoning can only be clear and complete if it includes the emotional content of this photograph.

It shouldn't be too much to think that in 2012, a judge might be open to the notion that emotion per se is not the bad guy. In any case, that is an oral argument I would like to hear. The authors, as well as all of their colleagues who are continuing to plow the fields of motivated reasoning and moral action, are doing us all a service by making arguments like that one more plausible in the days ahead.

Simple, Truthful and Almost Impossible from Tara Trask

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Someone once said “To understand a man, you have to walk a mile in his shoes”. The origin of this lovely idea is difficult to pin down, but its simplicity and truthfulness are both undeniable and at the same time almost impossible for many people to grasp. The research laid out here by Teper, Inzlicht and Page-Gould underscores the difficulty that we have as humans in putting ourselves in one another’s shoes and therefore being able to predict what others will do, or even what we would do ourselves when wearing shoes that are different than the ones we are wearing. *Why* this is difficult is one of the issues they address and although there is certainly more to be researched on this topic, the notion that emotion plays a role is useful and comports with other, more anecdotal solutions I’ve seen utilized with great effect: namely story-telling techniques to help close the gap on putting the jury in my client’s shoes.

The notion of a subject/object split, or in the case of litigation, the judge/judged split, dates to Rene Decartes and is firmly entrenched as the rational and proper way to judge the actions and even motivations of others. As a general rule, people believe that they can “objectively” judge others and in fact we ask them to do so in courtrooms every day. Whether that is even possible is not usually a question that gets much attention, unless you have an interest in postmodern philosophy, which questions the ability to separate the subject and the object or the judge and the judged in the first place.

From a philosophical perspective, I find the authors’ work interesting because on a small scale, it supports the notion that rationality alone is not the proper tool for determining how and why a person might do something or not do something. This research supports the idea that *emotion* cannot be discarded with regard to determining what a person would do or not do, or in fact what you yourself would do or not do. While many of us as practitioners know this intuitively, it is always useful to see research to back it up.

My goal as a consultant is put the jury in my client’s shoes, whether my client is a criminal defendant, a business person, a company or an inventor on a patent. To accomplish that, we try to tell the best story we can for the client within the bounds of the available evidence. Setting the stage, describing the scene, identifying the conflict or dilemmas in our protagonist’s head or in his or her world, describing emotions, fears and doubts *from his or her perspective* and using action words to describe what unfolded, all help to create a dramatic scene, hopefully building emotion, all to help put the jurors in our client’s shoes. It is using these techniques that help us break through the difficulties laid out so well here by these authors.

Images Credits: [Right way/wrong way](#), [Auto theft](#), [Emotion v logic](#)