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# The Cheater's High: The Unexpected Affective Benefits of Unethical Behavior

#### **Abstract**

Many theories of moral behavior assume that unethical behavior triggers negative affect. In this article, we challenge this assumption and demonstrate that unethical behavior can trigger positive affect, which we term a "cheater's high." Across 6 studies, we find that even though individuals predict they will feel guilty and have increased levels of negative affect after engaging in unethical behavior (Studies 1a and 1b), individuals who cheat on different problem-solving tasks consistently experience more positive affect than those who do not (Studies 2–5). We find that this heightened positive affect does not depend on self-selection (Studies 3 and 4), and it is not due to the accrual of undeserved financial rewards (Study 4). Cheating is associated with feelings of self-satisfaction, and the boost in positive affect from cheating persists even when prospects for self-deception about unethical behavior are reduced (Study 5). Our results have important implications for models of ethical decision making, moral behavior, and self-regulatory theory.

#### **Disciplines**

Medical Education | Mental and Social Health

Running Head: CHEATER'S HIGH?

### The Cheater's High:

# The Unexpected Affective Benefits of Unethical Behavior

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Cheater's High?

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Abstract

Many theories of moral behavior share the assumption that unethical behavior triggers negative

affect. In this paper, we challenge this assumption and demonstrate that unethical behavior can

trigger positive affect, which we term a "cheater's high." Across six studies, we find that even

though individuals predict they will feel guilty and have increased levels of negative affect after

engaging in unethical behavior (Studies 1a and 1b), individuals who cheat on different problem-

solving tasks consistently experience more positive affect than those who do not (Studies 2-5).

We find that this heightened positive affect is not due to the accrual of undeserved financial

incentives (Study 3) and does not depend on self-selection (Study 4). Cheating is associated with

feelings of self-satisfaction, and the boost in positive affect from cheating persists even when

cheaters acknowledge that their self-reported performance is unreliable (Study 5). Thus, even

when prospects for self-deception about unethical behavior have been reduced, the high cheaters

experience from "getting away with it" overwhelms the negative affective consequences that

people mistakenly predict they will experience after engaging in unethical behavior. Our results

have important implications for models of ethical decision making, moral behavior, and self-

regulatory theory.

Keywords: Cheating; Dishonesty; Ethics; Unethical Behavior; Affect

I was heady with happiness. Since I hadn't yet had my first taste of alcohol, I couldn't compare the feeling to a champagne high, but it was the most delightful sensation I'd ever experienced.

Frank Abagnale, describing his first successful scam (Abagnale & Redding, 2000)

People routinely face ethical dilemmas such as whether to use office supplies for personal use, download pirated music, cheat on an exam, inflate their business expenses, or fail to report a supplemental source of income on a tax return. Studies of unethical behavior suggest that many people engage in such behavior when faced with the opportunity (e.g., Callahan, 2004; Mazar, Amir, & Ariely, 2008; Mazar & Ariely, 2006; Murdock & Anderman, 2006). For instance, in academic settings, research has found students' cheating rates on tests as high as 90% (McCabe & Treviño, 1997). Similarly, the Internal Revenue Service estimates that tax fraud costs the U.S. government well over \$250 billion each year (2010). Rather than characterizing the behavior of a few unscrupulous individuals, unethical behavior seems to characterize the behavior of many—if not most—people (Mazar, et al., 2008).

In an effort to explain the pervasiveness of dishonest behavior, scholars in moral psychology and behavioral ethics have investigated factors that promote or curb unethical behavior (Bazerman & Gino, in press; Monin & Jordan, 2009; Tenbrunsel & Smith-Crowe, 2008). These findings have informed models of ethical decision making that have increased markedly in the past decades (Haidt, 2001; Kohlberg, 1969; Monin, Pizarro, & Beer, 2007; Pizarro, 2000; Rest, 1986; Tangney, Stuewig, & Mashek, 2007; Treviño, 1986). Importantly, prevailing models of unethical behavior presume that unethical behavior triggers negative feelings, such as guilt, shame, and anxiety (DePalma, Madey, & Bornschein, 1995; Eisenberg,

<sup>&</sup>lt;sup>1</sup> Throughout the paper we use the words immoral, dishonest and unethical interchangeably, as well as the words affect and feelings.

2000; Massi, 2005), and that the prospect of experiencing these negative feelings curbs unethical behavior (Wright, 1971).

In this paper, we challenge this fundamental assumption. We propose that although many individuals believe that engaging in unethical behavior will result in increased negative affect, acting dishonestly predictably triggers positive feelings. Across six experiments, we find support for our predictions.

#### The Role of Affect in Ethical Decision Making

Emotions are a critical component of any decision (Schwarz, 2000). This is particularly true of ethical decisions, which are often personal and highly self-relevant. Departing from prior theorizing that views ethical decision making as a primarily cognitive process (Kohlberg, 1969; Rest, 1986; Treviño, 1986), a growing literature has begun to explore the role of affect in ethical decision making (Haidt, 2001; Monin, et al., 2007; Pizarro, 2000; Tangney, et al., 2007). For instance, recent work in moral psychology shows that ethical decisions are frequently informed by one's feelings and intuitions (Greene & Haidt, 2002; Haidt, 2001). Consistent with this recent theorizing, scholars and philosophers alike have long assumed a link between affect and ethical decision making (see Plato, Republic, 2:359a–360d, 10:612b; see also Doris, 2002, Chapter 8; Rawls, 1971). Accounts of this link presume that immoral acts trigger negative affect (such as guilt, shame, and remorse) that in turn motivates individuals to refrain from engaging in future unethical behavior (Bandura, 1990; Baumeister, Vohs, DeWall, et al., 2007; McGraw, 1987; Schwarz, 2000; Wright, 1971). Affect indirectly influences future behavior through reflection and anticipation (Baumeister, Vohs, Nathan DeWall, et al., 2007). For example, guilt may create a negative association with a particular behavior, making future behaviors of this same type less likely (Massi, 2005). In short, extant work on affective reactions to unethical behavior has

assumed that individuals are motivated to avoid unethical behavior in order to sidestep its attendant aversive emotional experiences. This conceptualization assumes that negative affective reactions to one's own unethical behavior serve as an anticipated cost that curbs unethical behavior.

In spite of the ubiquity of the assumption that unethical behavior triggers negative affect, remarkably little work has investigated its actual affective consequences. The few studies that have directly tested this relationship have identified relatively small increases in negative affect following unethical behavior (Brock & Buss, 1964; Buss & Brock, 1963; Okel & Mosher, 1968; Ring, Wallston, & Corey, 1970). Importantly, all of these prior studies examined a very specific type of unethical behavior: acts that comply with an authority figure's request to cause direct harm to an identifiable victim (e.g., compliance with an experimenter who asks a participant to administer an electric shock to a victim). To our knowledge, the only study that did not involve this type of procedure found no significant effects of unethical behavior on participants' negative affect (Wallington, 1973).

Yet most unethical acts, including computer piracy, tax evasion, insurance fraud, workplace theft, and academic dishonesty, are not undertaken in order to comply with someone's request, nor do they cause (obviously) direct harm to an identifiable victim. Rather, they result from a conscious or non-conscious choice to engage in unethical behavior to benefit oneself. Surprisingly, no prior work has examined the affective consequences of voluntary unethical behavior. This is an important omission, not only because this type of unethical behavior is both common (Callahan, 2004) and costly (Hollinger & Langton, 2007; U.S. Internal Revenue Service, 2010), but also because its affective consequences may be very different compared to those of involuntary dishonesty.

We propose that voluntary unethical acts not only fail to elicit negative affect, but actually evoke *positive* affect, a phenomenon we term the "cheater's high." The idea that unethical behavior that benefits the self, with no apparent consequences to others, will trigger positive affect is consistent with many anecdotal accounts of dishonesty, theft, and fraud. These accounts include wealthy individuals who delight in shoplifting affordable goods (Seagrave, 2001), joy-riders who steal cars for the thrill (Katz, 1988), and fraudsters who revel in their misdeeds (Abagnale & Redding, 2000). The "cheater's high" is also related to Ekman's (2001) concept of "duping delight," or the exhilaration caused by successfully deceiving others, which to date, lacks an empirical demonstration (DePaulo et al., 2003).

We investigate the possibility that affective reactions to unethical behavior are more complicated than prior work has assumed, as well as inconsistent with what individuals predict. Specifically, we challenge a fundamental assumption of the ethical decision making literature by considering the possibility that unethical behavior can trigger positive affective consequences. Our findings break new ground by demonstrating that theoretical models of ethical decision making should account for a broader range of affective consequences than they currently do.

# **Negative Affective Consequences of Predicted Unethical Behavior**

The pervasiveness and frequency with which people engage in unethical behavior (Callahan, 2004) contrasts with the desire to maintain a positive self-concept both privately and publicly (Adler, 1930; Allport, 1955; Rogers, 1959). People are motivated to resolve this tension, even when doing so requires a degree of self-deception or pretense (Schlenker et al., 1980; Tajfel, 1982). Moral values constitute a central aspect of an individual's positive self-image (Chaiken, Giner-Sorolla, & Chen, 1996). It is therefore unsurprising that people perceive

themselves as honest and deserving, and strongly believe in their own morality (Aquino & Reed, 2002; Greenwald, 1980; Sanitioso, Kunda, & Fong, 1990).

This misalignment between actions (e.g., one's unethical behavior) and internal desires (e.g., one's desire to be ethical) creates a psychological threat for individuals as well as a sense of dissonance (Festinger, 1957). Behavioral ethics scholars argue that when people face ethical dilemmas, they experience a tension between a person's "want" and "should" selves (Bazerman, Tenbrunsel, & Wade-Benzoni, 1998; Mead et al., 2009; Tenbrunsel et al., 2010). The "want" self is defined by short-term goals, impulsivity, and "hot" decisions, whereas the "should" self involves more long-term, rational, and "cold" decisions. Tenbrunsel et al. (2010) hypothesized that the "should" self dominates during the prediction phase (when people consider future decisions hypothetically or make plans and predictions) and that the "want" self takes over in the action phase, such that people overestimate their future ethicality.

Ethical forecasts reflect one's hopes and ideals (Kivetz & Tyler, 2007; Newby-Clark et al., 2000) and undervalue both situational constraints (Diekmann, Tenbrunsel, & Galinsky, 2003) and one's motivations in the heat of the moment (Diekmann, et al., 2003; Diekmann et al., 2012). Because of this, people's predictions of their ethical behavior tend to be overly optimistic. In fact, people overestimate their future altruistic actions in contexts such as donating time and money to charity (Epley & Dunning, 2000) and participating in a blood drive (Trope & Liberman, 2003).

In the same way that the "should" self mispredicts ethical behavior, we expect the "should" self to also mispredict that unethical behavior will evoke negative affect. We propose that when people predict what their affective state will be after they act unethically, their "should" self and their desire to be moral will be salient, and the discrepancy between their

moral self-image and the actions they are imagining themselves engaging in will result in projected dissonance and an affectively negative state. Thus, we hypothesize that when individuals predict their affective reactions to unethical behavior, they will predict that they will experience heightened negative affect (Hypothesis 1).

#### Positive Affective Consequences of Actual Unethical Behavior

Our predictions about how individuals will feel after actually engaging in unethical behavior are exactly the opposite of the predictions we expect them to make. Affective forecasts (e.g., whether we'll enjoy a planned beach vacation) are commonly biased (Gilbert, Gill, & Wilson, 2002; Kurtz, Wilson, & Gilbert, 2007; Wilson & Gilbert, 2003). In the case of affective reactions to unethical behavior, we expect a similar bias, whereby people expect to experience heightened negative affect after behaving dishonestly when in fact they experience a boost in positive affect.

While we predict that the "should" self is instrumental in making predictions, the "want" self is likely to operate at the time an individual decides to behave unethically (Tenbrunsel, et al., 2010). In this state, people are more likely to focus on the immediate benefits they are accruing rather than the potential costs that they may experience later on, such as diminished self-image or risk to their reputation (Loewenstein, 1996). We predict that this focus on the immediate benefits of unethical behavior may evoke positive affect.

Specifically, there are at least three psychological benefits that result from unethical behavior. First, unethical behavior often turns a situation to the actor's advantage, allowing access to resources they do not legitimately deserve. Undeserved gains from unethical behavior may be encoded as windfalls, whether they represent financial gains (e.g., additional money), social gains (e.g., beating an opponent), or psychological gains (e.g., better grades). These

windfalls, or unexpected gains, are positive events that can trigger positive affect (Arkes et al., 1994; Meloy, Russo, & Miller, 2006).

Second, unethical behavior may also confer psychological benefits derived from a sense of accomplishment and control. Engaging in unethical behavior allows actors to circumvent rules by which others are bound, giving cheaters an expanded range of options and more control over their outcomes. For instance, deception allows a person to shape information that others use and thus to guide them toward decisions that advantage the deceiver (Lewicki, 1983). The resulting sense of control should increase positive affect (Carver & Scheier, 1990).

Third, unethical behavior often involves the challenge of breaking rules and overcoming systems that are designed to constrain behavior. Convincing one's boss of a lie or finding a loophole in a tax code represents a potentially interesting and enjoyable puzzle. In a study of cheating at work, a supermarket cashier who consistently embezzled from her register sad the behavior made her job "more interesting; it gave her new targets and a sense of challenge" (Mars, 1982, p. 31). It is not unusual for people to enjoy engaging in effortful cognitive endeavors (Cacioppo et al., 1996), and succeeding in a challenging task may engender a sense of pride, even if the behavior itself might otherwise be a source of shame.

These psychological benefits may produce a giddy feeling of "having gotten away with something." The fact that one's behavior is forbidden may enhance this experience (Wood et al., 1997). This explanation is consistent with the Frank Abagnale quote that opens this paper and exemplifies this affective "high." Taken together, these arguments suggest that unethical behavior can increase positive affect (Hypothesis 2).

#### **Overview of the Research**

We tested our predictions in six experiments. We first conducted two studies that asked individuals to predict how they believed they would feel if they acted unethically. In these two prediction studies (Studies 1a and 1b), participants imagined having the opportunity to behave unethically and deciding either to act honestly or dishonestly. In both studies, participants consistently predicted they (or someone else) would experience negative affect after behaving unethically.

Next, we conducted four experiments that afforded participants the opportunity to cheat. Across these studies, contrary to what people predicted, engaging in unethical behavior lead to an increase in positive rather than negative affect. In Study 2, we identify a "cheaters high" by showing that cheating by over-reporting performance on a problem-solving task boosts positive affect, controlling for baseline affect. In Study 3, we disentangle the effects of cheating and monetary rewards by varying the level of financial incentives that participants received for their self-reported performance, and find further support for our hypotheses. Study 4 uses novel experimental methods to address the issue of self-selection and shows that it is the act of behaving unethically that leads to increased positive affect. Finally, in Study 5 we examine the underlying mechanism for the cheater's high. We find that after cheating people are focused on the benefits they derived from their unethical acts and feel more satisfied with their actions, even in the presence of explicit acknowledgment that the experimenters are aware that participants may have cheated.

#### **Study 1: Affective Predictions**

We conducted two studies to assess people's predictions of how they or another person would feel after engaging in unethical behavior. In the first study, we asked participants to

project how they would feel after cheating in an experiment. In the second, we asked participants to project how they would feel after lying on a timesheet to their employer. In this second study, we also varied whether people projected their own feelings or the feelings of a subordinate employee. We included this manipulation so that we could test whether individuals predict that others (just not themselves) would experience heightened negative affect after acting unethically.

#### Study 1a: Method

**Participants.** One hundred and forty-six participants (52% male;  $M_{\text{age}}$ =33, SD=11.83) completed a survey online for a payment of \$1. The study was conducted using MTurk.

**Procedure.** We told participants that we were interested in their predictions of how they would react to an experiment that we were planning to run in the near future. We described the experiment to them, which involved a task that was either identical or similar to the kind we use in our Studies 2-5. The experiment we described offered participants the opportunity to act unethically. The instructions read:

In the study, we will give students a simple math test to complete under time pressure. The test sheet consists of 20 matrices, each based on a set of 12 three-digit numbers. We will tell students that they have 5 minutes to find two numbers per matrix that add up to 10. Each correctly solved pair pays them \$1. In addition to the test sheet, each participant will receive an envelope with 20 one-dollar bills. At the end of the study, participants will have to take money according to their performance and turn back the envelope to the experimenter with the unearned money. About 10-15 students will participate in each session.

Once the 5 minutes are up, we will give students a collection slip on which they are asked to report the number of correctly identified pairs they've found. We will then instruct participants to first recycle their test sheet (using the recycling box in the room) and then fill out their collection slips. Once they complete the collection slip, students will pay themselves accordingly and take the unearned money in the envelope to the experimenter as they leave the room. That means that in this study students can cheat by reporting a number for their self-reported performance that is higher than their actual performance on the task, and thus make more money on the task.

Please imagine being a participant in this experiment...

**Manipulation**. We asked half of the participants to imagine that they cheated and to predict their affective reactions to cheating. We asked the other half of participants whether or not they would cheat in this setting, and then we asked them to imagine that they cheated and to predict their affective reactions to cheating. In this second condition, we first asked participants the following questions: (1) "How likely would you be to cheat by over-reporting your performance on the task?" (on a 7-point scale ranging from 1=Very unlikely to 7=Very likely), and (2) "Imagine that that you solved six matrices correctly and decided to cheat. How many matrices do you think you would report having solved?"

We asked all of the participants to "Imagine that you in fact decided to cheat, and report having solved more matrices correctly than you actually did. How likely would you be to experience each of the following emotions right after cheating?"

Participants responded to the 20 items of the Positive and Negative Affectivity Schedule (PANAS; Watson, Clark, & Tellegen, 1988), which measures both positive and negative affect (PA:  $\alpha$ =.88, NA:  $\alpha$ =.94) using a five-point scale (ranging from 1=Very slightly or not at all to 5=Extremely). Using a similar scale, they also indicated the extent to which they would feel clever, capable, accomplished, satisfied, and superior ( $\alpha$ =.94) after cheating. Next, we asked participants to report the extent to which they thought cheating by over-reporting on this task would be morally wrong, unethical, and dishonest ( $\alpha$ =.88) using a 7-point scale (ranging from 1=Not at all to 5=Very much). Finally, participants answered a few demographic questions about their age and gender.

#### **Results and Discussion**

We first examined whether our manipulation produced differences on the main variables measured in the study. We found no significant differences across conditions on positive affect

(t(144)=-1.21, p=.23), feeling clever (t(144)<1, p=.59), or the unethicality of the behavior (t(144)<1, p=.32). However, when we asked participants whether or not they would cheat first, they reported feeling greater negative affect (M=3.17, SD=0.97) than they did in the control condition (M=2.84, SD=1.05), t(144)=1.98, p=.05. In addition, these participants reported greater guilt (based on the one-item measure included in the PANAS, M=4.14, SD=1.19 vs. M=3.69, SD=1.38, t(144)=2.10, p=.037).

Most importantly, however, we wanted to demonstrate that participants would universally predict they would feel significantly higher levels of negative rather than positive affect after cheating. To test this hypothesis, we conducted a mixed ANOVA using positive and negative affect as a within-subjects factor and condition as a between-subjects factor. Consistent with our first hypothesis, participants across conditions predicted they would experience greater negative affect (M=3.00, SD=1.02) than positive affect (M=2.33, SD=0.76), F(1,144)=36.08, p<.001,  $\eta^2_p$ =0.20. The effect of condition was not significant (p=.36), while the interaction term was (F(1,144)=4.63, p=.033,  $\eta^2_p$ =0.031). People predicted experiencing greater negative rather than positive affect both in the conditions with intention questions (F(1,70)=37.99, p<.001,  $\eta^2_p$ =0.35) and in the control condition (F(1,74)=6.71, P=.012,  $\eta^2_p$ =0.083).

# **Study 1b: Method**

**Participants.** One hundred and thirty-seven students (45% male;  $M_{\text{age}}$ =20.4, SD=1.89) completed a survey as part of a laboratory session in exchange for \$10.

**Design and procedure.** Participants read one of four versions of a scenario from a 2 (*self* vs. *other*) X 2 (*lie* vs. *no lie*) between-subjects design. In the *self* condition, participants imagined they were Pat, a consultant at a large consulting company; in the *other* condition, participants imagined they were Pat's manager. In the vignette, Pat needs to fill out a time sheet that will

determine whether or not he/she will earn a \$500 bonus. Pat is five hours short of the 500 billable hours required for the bonus, but could bill five hours spent on a training course to meet the goal without anyone finding out, although this is against company policy. In the *lie* condition, Pat ends up inflating his/her billable hours. In the *no lie* condition, Pat ends up reporting the number of hours he/she actually worked.

After reading the vignette, participants reported the extent to which they or Pat (depending on whether they are reading from the perspective of Pat or Pat's manager) would feel positive and negative affect after reporting hours, using the PANAS (Watson, et al., 1988, PA:  $\alpha$ =.78, NA:  $\alpha$ =.89).

#### **Results and Discussion**

We conducted ANOVAs to test the effects of our two manipulations (i.e., self or manager's perspective and committing or not committing the unethical behavior) on participants' intuitions about their or Pat's affective state.

**Positive affect.** Participants who read the scenario from Pat's perspective and learned that Pat behaved unethically (by billing five training hours against company policy) reported that they (if they were Pat) would experience only marginally higher positive affect than did those who learned that Pat acted ethically by submitting an accurate timesheet (M=2.43, SD=0.70 vs. M=2.14, SD=0.68; F(1,62)= 2.77, p = .10,  $\eta^2_p$  = .04). Similarly, participants who read the scenarios from the manager's perspective reported that Pat would experience slightly higher positive affect for behaving unethically rather than ethically (M=2.75, SD=0.64 vs. M=2.47, SD=0.71; F(1,71)=3.22, p=.08,  $\eta^2_p$ =.04).

**Negative affect**. Participants who read the scenario from Pat's perspective and learned that Pat behaved unethically reported that they (as Pat) would experience higher negative affect

than did those who learned that Pat acted ethically (M=2.76, SD=1.11 vs. M=2.02, SD=0.60; F(1, 62)=11.33, p=.001,  $\eta_p^2$  =.15). Similarly, participants who read the scenarios from the manager's perspective also reported that Pat would experience higher negative affect after learning Pat had behaved unethically rather than ethically (M=3.07, SD=0.92 vs. M=2.21, SD=0.55; F(1, 71) = 22.39, p<.001,  $\eta_p^2$  =.24).

A mixed ANOVA with positive and negative affect as a within-subjects factor and our two manipulations as between-subjects factors demonstrated that the interaction between lying and the within-subjects affect measures was significant (F(1,133)=8.64, p=.004,  $\eta^2_p=0.06$ ). People predicted higher negative than positive affect when either they or Pat lied (F(1,68)=5.44, p=.023,  $\eta^2_p=0.07$ ), and they predicted marginally higher positive than negative affect when either they or Pat told the truth (F(1,65)=3.29, p=.074,  $\eta^2_p=0.05$ ).

Consistent with the results of Study 1A, this study demonstrates that participants believe unethical behavior will lead to a significant increase in negative affect but no significant increase in positive affect. This is true whether they are predicting their own affective state or the affective state of another person. These beliefs are consistent with the characterization of unethical behavior in the literature as an affectively negative experience.

#### Study 2: Cheater's High

In Study 2, we consider affective reactions to actual cheating. We control for baseline affect so that we can disentangle the influence of positive affect on cheating from the effect of cheating on positive affect.

#### Method

**Participants.** One-hundred seventy-nine individuals (40% male;  $M_{\rm age}$ =25, SD=8.80) from a large Northeastern university participated in the study for a \$10 payment plus a bonus based on their performance.

**Procedure.** Participants worked in individual cubicles. They first completed an abbreviated 10-item version of the Positive and Negative Affectivity Schedule (PANAS; Watson, et al., 1988). Specifically, we used the items *excited*, *enthusiastic*, *interested*, *strong*, and *determined* to measure positive affect ( $\alpha$ =.86) and *upset*, *hostile*, *ashamed*, *jittery*, and *scared* to measure negative affect ( $\alpha$ =.75).

Next, participants engaged in a timed anagram task. The task, adapted from Ruedy and Schweitzer (2011) involved unscrambling as many of 15 words as participants could in four minutes. Participants earned a \$1 bonus for every correctly unscrambled word. The page that listed the scrambled words was stapled to a packet of sheets and a manila folder. In the packet were two sheets of carbonless copy paper that, unbeknown to participants, created an imprint of their writing. At the end of four minutes, the experimenter asked participants to tear the top sheet out of packet. The experimenter then collected the packets and folders. Participants were not able to see that the packets the experimenter collected contained a complete imprint of the words they had unscrambled.

Next, the experimenter handed out answer keys, and participants checked their work in complete privacy. This stage of the experiment afforded participants the opportunity to cheat; as they checked their answers, they could add answers to their answer sheet. The experimenter determined whether or not participants had cheated by comparing the imprint of the answers

participants had written down in the first four minutes of the study with the answer sheets they ultimately submitted for payment after checking their work.

Then, in an ostensibly unrelated study, participants answered some brief personality questions (to support the cover story) and then completed the same 10-item affect measure as before ( $\alpha_{PA}$ =.90,  $\alpha_{NA}$ =.66).

#### **Results and Discussion**

We excluded six participants for failing to complete the second affect measure. On average, participants correctly unscrambled 3.84 (SD=2.08) of the 15 anagrams. Seventy-one (41.0%) participants cheated by writing in additional answers after the time to work on the task had ended. Participants who cheated added 2.48 answers on average (SD=1.98).

**Baseline affect.** We found no significant differences in positive affect ( $M_{cheaters}$ =2.74, SD=0.84 vs.  $M_{non-cheaters}$ =2.76, SD=0.80; t(171)=0.18, p=.86) or negative affect ( $M_{cheaters}$ =1.26, SD=0.47 vs.  $M_{non-cheaters}$ =1.21, SD=0.37; t(171)=0.91, p=.36) measured at the beginning of the study.

**Post-task affect.** Both honest participants ( $M_{Time1}$ =2.76, SD=0.80 and  $M_{Time2}$ =3.10, SD=0.95, t(101)=4.12, p<.001) and cheating participants (and  $M_{Time1}$ =2.74, SD=0.84 and  $M_{Time2}$ =3.32, SD=0.84 t(70)=7.25, p<.001) experienced boosts in affect after the cheating opportunity. Both honest ( $M_{Time1}$ =1.21, SD=0.37 and  $M_{Time2}$ =1.45, SD=0.47, t(101)=5.36, p<.001) and cheating participants ( $M_{Time1}$ =1.26, SD=0.47 and  $M_{Time2}$ =1.45, SD=0.48 t(70)=3.55, p=.001) also experienced boosts in negative affect after the cheating opportunity.

In order to test whether cheaters experienced a bigger boost in positive affect as compared to non-cheaters, we conducted an ANOVA using post-task affect as the dependent measure, cheating as a predictor, and baseline affect and task performance as controls. We

include task performance as a covariate in all studies since it may influence both cheating (McCabe & Treviño, 1997) and affect (Carver & Scheier, 1990). Supporting our predictions, cheaters reported significantly higher positive affect than non-cheaters, F(1,169)=5.46, p=.02,  $\eta^2_p=0.03$  (see Figure 1). There was no difference in negative affect between cheaters and non-cheaters (M=1.45, SD=0.48 vs. M=1.45, SD=0.47; F(1,169)=0.29, p=.59). If we do not control for performance, the results for positive and negative affect are unchanged.

In this study, we found no differences in baseline affect. However, after the opportunity to overstate performance, cheaters reported higher positive affect (but no higher negative affect) than non-cheaters did.

#### **Study 3: Effects of Incentives**

It is possible that the increase in positive affect we observed in Study 2 is due to the increased financial reward participants received for cheating, rather than the act of cheating itself. In Study 3, we disentangle the effect of financial rewards from the effect of cheating by creating three conditions that vary financial incentives. If the boost in positive affect is due to the increased compensation participants receive for cheating, then the effect of cheating on positive mood should increase commensurately as the financial incentive to cheat increases. In other words, we should find an interaction between the incentive condition and cheating. Although we expect a main effect for incentive condition (higher financial incentives should trigger positive boosts in mood across cheaters and non-cheaters), a main effect for cheating without a significant interaction between cheating and condition provides evidence that the act of cheating increases one's positive affect (the "cheater's high") independently of its financial rewards.

#### Method

**Participants.** We recruited 233 participants (41% male;  $M_{age}$ =20, SD=3.64) from a large Northeastern university. Participants earned a \$10 payment plus a bonus payment based on their performance.

**Procedure.** The procedure was identical to Study 2, except that there were three payment conditions; participants were told they would earn a bonus per correct answer of \$0.10, \$1, or \$2. We collected affect measures (Watson, et al., 1988) upon arrival (Time 1,  $\alpha_{PA}$ =.85;  $\alpha_{NA}$ =.66), and immediately after the cheating manipulation (Time 2,  $\alpha_{PA}$ =.89;  $\alpha_{NA}$ =.74).

#### **Results and Discussion**

Eight participants failed to complete one or more of the measures. We report results for the remaining 225 participants. On average, participants correctly unscrambled 3.91 (SD=2.10) of the 15 anagrams. Eighty-seven (38.7%) participants cheated, adding an average of 1.94 answers (SD=1.51). Cheating was somewhat more common in the \$1 condition (50%) than in the \$2 condition (35%) or the \$0.10 condition (32%). This difference approached significance,  $\chi^2(2, N=225)=5.932, p=.052$ , though the fact that the highest levels of cheating were in the \$1 condition (rather than the \$2) do not suggest that the size of the monetary incentives drove this effect, and is consistent with research showing that increasing payoffs is not linearly related to cheating (Mazar, et al., 2008).

**Baseline affect.** At baseline, neither positive affect ( $M_{cheaters}$ =2.69, SD=0.89 vs.  $M_{non-cheaters}$ =2.80, SD=0.78; t(223)=1.00, p=.32) nor negative affect ( $M_{cheaters}$ =1.34, SD=0.44 vs.  $M_{non-cheaters}$ =1.31, SD=0.40; t(223)=0.56, p=.57) was significantly different across conditions.

**Post-task affect.** In this experiment, honest participants reported less positive affect after the cheating opportunity ( $M_{Time1}$ =2.80, SD=0.78 and  $M_{Time2}$ =2.66, SD=0.86, t(137)=2.70, p=.008), but cheating participants (and  $M_{Time1}$ =2.69, SD=0.89 and  $M_{Time2}$ =2.72, SD=0.94

t(86)=.40, p=.69) experienced no significant change. Both honest ( $M_{Time1}$ =1.31, SD=0.40 and  $M_{Time2}$ =1.59, SD=0.62, t(137)=6.52, p=.000) and cheating participants ( $M_{Time1}$ =1.34, SD=0.44 and  $M_{Time2}$ =1.53, SD=0.57 t(86)=4.07, p=.000) also experienced boosts in negative affect after the cheating opportunity.

We predicted that positive affect would be higher for participants who cheated than those who did not. We expected higher-payment conditions to promote greater positive affect, but that these effects would be independent. To test whether positive affect increased significantly for cheaters across payment conditions, we ran a univariate ANOVA with positive affect at Time 2 as the dependent variable, cheating and payment condition as the main factors, and positive affect at Time 1 and actual performance on the task as covariates. There was a main effect of payment condition on positive affect at Time 2, F(2,217)=4.31, p=.02,  $\eta^2_{p}=.04$ , such that those in the conditions that paid more had higher levels of positive affect than those in lower-paying conditions (\$2: M=2.91, SD=0.92; \$1: M=2.69, SD=0.94; \$0.10: M=2.47, SD=0.76). Comparisons revealed that positive affect in the \$2 condition was significantly higher than in the \$0.10 condition (t(151)=3.27, p=.00), but the \$1 condition was not significantly different form the \$2 condition (t(141)=1.44, p=.15) or the \$0.10 condition (t(152)=1.61, t=0.11). We also found that, across conditions, cheaters reported significantly higher positive affect (t=0.72, t=0.94) than non-cheaters (t=0.86; t=0.86; t=0.86; t=0.86; t=0.94, t=0.94, t=0.94, t=0.94, t=0.94, t=0.94) than non-cheaters (t=0.86; t=0.86; t=0.86; t=0.94, t=0.94

Most importantly, the effect of cheating is significant even when controlling for payment condition, and the interaction of cheating and payment condition is not significant (F(2,217)=0.12, p=.89), suggesting that cheating produces an affective boost independent of the affective benefit triggered by higher payments. A similar analysis using negative affect as the

dependent variable found that neither payment condition (F(2,217)=0.33, p=.72) nor cheating (F(1,217)=2.10, p=.15) predicted negative affect.

Finally, we wanted to confirm that it was the decision to cheat itself, rather than the extent of cheating, that produces the higher levels of positive affect. Therefore, we regressed positive affect at Time 2 on positive affect at Time 1, task performance, two dummy variables for the \$2 and \$1 experimental conditions (the \$0.10 condition was the reference category), and a variable measuring the extent of cheating (how many questions they cheated on). The coefficient for the extent of cheating was not significant (B=.03, p=.50), suggesting that it is the act of cheating rather than its extent that triggers the higher levels of positive affect.

These findings provide further support for a link between cheating and positive affect.

Importantly, these results demonstrate that cheating triggers an emotional "high" independent of its associated financial rewards.

#### **Study 4: Self-Selection**

An important challenge in the study of unethical behavior is that unethical behavior is often self-selected: people decide whether to behave dishonestly or honestly. We address this limitation in Study 4 by developing a novel experimental approach for studying ethical decision making. Specifically, we pair each participant with a confederate and have them work together and share a joint reward. We randomly assign participants to confederate partners who either do or do not over-report their joint performance. In this study, we investigate the "cheater's high" for participants randomly assigned to either a cheating or no-cheating condition. We also use a very different sample population in a different country.

#### Method

**Participants.** We recruited 46 participants (33% male;  $M_{age}$ =27, SD=9.0) from London, England. Participants earned £10 for participating in the study and had the chance to earn up to an additional £10 in bonus based on their performance.

**Procedure.** We randomly assigned participants to one of two conditions (cheating or nocheating). In both conditions, participants completed a problem-solving task that included 20 matrices, each based on a set of 12 three-digit numbers (adapted from Mazar, et al., 2008). We gave participants five minutes to find two numbers in each matrix that summed to 10; this duration was not sufficient for anyone to solve all 20 matrices, ( $M_{\text{solved}}$ =5.0, SD=3.2,  $Max_{\text{solved}}$ =13.0).

Participants always completed the matrix task in a room with a confederate. When the experimenter brought the confederate and the participant to the room, she left them with a timer set for five minutes and informed them that when the timer went off, they should switch sheets to grade each other's worksheet. We also informed participants that they would each earn a bonus based upon the total number of matrices they and their (confederate) partner scored on the task, £0.25 for each correct answer, up to a total of £10. When the experimenter returned to the room, she first asked the participant to report the confederate's score. The confederate always answered five matrices correctly, and every participant accurately reported five. Then, the experimenter asked the confederate to report the participant's score.

In the no-cheating condition, the confederate accurately reported the participant's score. In the cheating condition, the confederate always added five to the total number of matrices that the participant had legitimately solved. This over-statement corresponded to an additional

payment of £2.50 that participants had not legitimately earned. *None* of the participants in the cheating condition corrected the confederate's over-reporting of their score.

We collected affect measures (using the abbreviated PANAS; Mackinnon et al., 1999): upon participants' arrival (Time 1,  $\alpha_{PA}$ =.81;  $\alpha_{NA}$ =.85), and immediately after the cheating manipulation (Time 2,  $\alpha_{PA}$ =.85;  $\alpha_{NA}$ =.77).

#### **Results and Discussion**

We expected participants in the cheating condition, as compared to those in the nocheating condition, to experience the cheater's high and report a boost in positive affect.

**Baseline affect.** At baseline, neither positive affect ( $M_{all-cheating}$ =2.90, SD=0.66 vs.  $M_{no}$ -cheating=2.76, SD=0.87; t(47)=.66, p=.51) nor negative affect ( $M_{all-cheating}$ =1.50, SD=0.72 vs.  $M_{no}$ -cheating=1.38, SD=0.54; t(47)=.70, p=.49) was significantly different across conditions.

**Post-task affect**. We test whether positive affect increased significantly for those in the cheating condition by conducting a univariate ANOVA with positive affect at Time 2 as the dependent variable, condition as the main factor, and positive affect at Time 1 and actual performance on the matrix task as covariates. There was a main effect of condition on positive affect at Time 2, F(1,45)=4.05, p=.051,  $\eta^2_p=.09$ , such that those in the cheating condition had higher levels of positive affect than those in the no-cheating condition (see Figure 2). These results suggest that, even when cheating is not a self-selected behavioral choice, it creates a boost in positive affect.

As in all prior studies, we ran the same models using negative affect as a dependent measure. In two additional univariate ANOVAs, including prior-round negative affect and actual performance on the matrix task as covariates, the cheating condition had no influence on negative affect at Time 2, F(1,45)=0.29, p=.60.

By assigning participants to a cheating condition, Study 4 identifies a cheater's high that cannot be explained by self-selection effects. We also introduce a novel approach for studying unethical behavior with a method that randomly assigns participants to a cheating or no-cheating condition. Although this approach solves the problem of self-selection, it introduces social pressure to go along with the confederate, which may influence our result. However, in this case, since succumbing to social pressure is likely to be experienced as an aversive experience, we created an all-cheating condition which is likely to have mitigated effects. Consequently, this study offers a conservative test of the cheater's high.

#### Study 5: Getting away with it

In Study 5, we investigate the underlying mechanism of the cheater's high. In this study, we consider the possibility that the cheater's high is driven by the thrill of getting away with unethical behavior. To test for this possibility, we explicitly acknowledge the potential for cheating in our study. In prior studies of unethical behavior, cheaters have not been explicitly confronted by experimenters who acknowledge that cheating is possible as part of the experiment. Schweitzer and Hsee (2002) identify self-justification as an essential antecedent to lying and Gino, Ariely and colleagues (Gino, Ayal, & Ariely, 2009; Mazar, et al., 2008; Mead, et al., 2009) suggest that individuals strive to preserve their moral self-concept while engaging in unethical behavior through self-deception. Thus, confronting participants with the experimenter's recognition that cheating is possible should curtail opportunities for rationalizations geared toward preserving a positive moral self-concept, increasing guilt and negative affect and dampening positive affect. If, however, the cheater's high is triggered by the thrill of getting away with unethical behavior, we should find the opposite result.

#### Method

**Participants.** Two hundred and five (46% male;  $M_{\rm age}$ =34, SD=11.6) participants were recruited from Mturk to complete an online study. Participants earned \$0.50 for participating in the study and had the chance to earn up to an additional \$4.50 in bonuses based on their reported performance.

**Design and procedure.** The study was presented as a test of performance under time pressure. We randomly assigned participants to one of two conditions ("reality check" vs. control). Participants in both conditions completed the full PANAS (Watson, et al., 1988, PA:  $\alpha$ =.92, NA:  $\alpha$ =.89) and then completed an anagram task (adapted from Wiltermuth, 2011). The anagram task presents participants with a list of nine jumbled words and instructions that read: "Each jumble has only one correct answer, and the jumbles <u>must be solved in order</u>. In other words, *if you successfully unscramble the first three word jumbles but not the fourth, you will earn a bonus only for the first three–even if you also successfully unscramble the fifth, sixth, and seventh word jumbles."* Participants were asked to solve the jumbles in order, not proceeding to the next one unless the prior one had been solved. They were also instructed to "use only your own mind, and no other tools, to solve the jumbles" so that it would be clear that using online anagram unscramblers was not permitted.

The third jumble in the list was "UNAAGT," for which the only solution is "TAGUAN", a species of flying squirrel. Previous pretesting has confirmed that the likelihood of correctly identifying this solution is miniscule (Wiltermuth, 2011), and even the largest online web-based anagram solving programs do not return "TAGUAN" as an answer.

Participants had 10 minutes to solve as many of the jumbles as possible in the order in which they were presented. Next, they turned to a page on which they reported how many

jumbles they correctly unscrambled, again being reminded that they should only report the number they had been able to *consecutively* solve. We interpret any answer of 3 or more to be indicative of cheating on the task.

**Experimental manipulation**. In this experiment, we manipulated whether participants were confronted with the experimenter's explicit acknowledgement that participants could misrepresent their performance in the anagram task. After reporting their answer, participants read the following. In the control condition, participants read:

"Thank you for your participation in this series of tasks. You have one more task to complete before the end. Your data is important to us as we are trying to understand performance under time pressure."

In the "Reality check" condition, participants also read:

"We realize we cannot check your answers (i.e., whether you actually solved correctly the jumbles you told us you solved) and that you may have cheated on this task by inflating your performance. We hope you reported your answers honestly."

To emphasize the fact that their answers would not be reliable if they had misrepresented their true performance, we also asked participants in this condition, "To what extent can we rely on your answers?" Responses were provided on a 5-point scale ranging from 1="Not at all" to 5="Completely."

Post-manipulation measures. After this manipulation, participants completed the PANAS again (PA:  $\alpha$ =.93, NA:  $\alpha$ =.79). To assess the extent to which cheating may provide a feeling of self-satisfaction, we also asked the extent to which participants felt clever, capable, accomplished, satisfied, and superior (measured on the same 5-point scale as the PANAS, from "not at all" to "extremely"). We averaged the responses to these 5 items to create a measure of

feeling clever or self-satisfied ( $\alpha$ =.93). Participants also responded to a 10-item measure of state guilt (Jones, Schratter, & Kugler, 2000). Sample items, measured on a 5-point scale ranging from "strongly disagree" to "strongly agree," include "I have recently done something that I deeply regret," and "Lately, I have been calm and worry-free [reverse scored]" ( $\alpha$ =.86).

#### **Results**

We excluded two participants for failing an attention filter that preceded our manipulation, though the nature and significance of our results are unchanged regardless of whether we include them or not. Fifty-two percent of participants reported they successfully unscrambled the third anagram (or more), reporting on average having solved 4.63 of the anagrams (*SD*=2.82).

**Baseline affect.** As with all our other studies, there were no significant differences between cheaters and non-cheaters in terms of their pre-cheating levels of either positive  $(M_{cheaters}=3.21, SD=0.89 \text{ vs. } M_{non-cheaters}=3.01, SD=0.83; t(201)=1.65, p=.10)$  or negative  $(M_{cheaters}=1.25, SD=0.45 \text{ vs. } M_{non-cheaters}=1.17, SD=0.31; t(201)=1.36, p=.18)$  affect, though cheaters were directionally happier than non-cheaters ex-ante.

Post-task affect. Our main interest in this study was whether confronting participants with an explicit acknowledgement that the experimenters were aware they could be cheating would dampen the cheater's high effect. We predicted that it would not. In fact, if participants are focused on the benefits they had just accrued after behaving unethically (e.g., the fact that they were able to advance their self-interest and get away with it), then we would expect our manipulation to produce no significant differences in affect after cheating.

We first wanted to check whether the reality-check condition alone influenced participants' affective states. While participants in the reality-check condition did not experience

any differences in their average levels of either positive ( $M_{reality\ check}$ =3.07, SD=0.95 vs.  $M_{controls}$ =2.91, SD=0.96; t(201)=1.17, p=.24) or negative ( $M_{reality\ check}$ =1.32, SD=0.38 vs.  $M_{controls}$ =1.31, SD=0.34; t(201)=.11, p=.92) affect after the cheating opportunity, participants in the reality-check condition did report higher levels of self-satisfaction ( $M_{reality\ check}$ =3.31, SD=1.38 vs.  $M_{controls}$ =2.90, SD=1.37; t(201)=2.14, p=.03).

Positive affect. We test whether positive affect increased significantly after the cheating opportunity by conducting a univariate ANOVA with positive affect at Time 2 as the dependent variable, two between-subjects factors (reality check vs. control; cheater vs. not), and positive affect at Time 1 as a covariate. We could not include task performance as an additional covariate in this analysis because we do not know the true level of participants' performance on the anagram task. As in Studies 2-4, there was a main effect of cheating (the cheater's high) on positive affect at Time 2, F(1,198)=45.81, p<.001,  $\eta_p^2$  = .19, such that those who cheated had higher levels of positive affect than those who did not, controlling for baseline positive affect. This result provides further support for our second hypothesis. There was no significant effect for condition (reality check vs. control), nor for the interaction between cheating and condition, indicating that being made aware that the experimenters knew that participants could cheat (removing the ease of self-deception around their behavior) does not dampen the cheater's high. These means, as well as the means for the next two tests, are presented in Figure 3.

Since we use a dummy variable for cheating, the increased levels of positive affect cannot be attributed to those who may have believed they performed well on the task. For example, some participants may have ignored the instructions that the jumbles must be solved in order and, after solving a number of jumbles, experienced positive affect. Since our dummy variable equates individuals who reported solving three jumbles correctly with those reporting

nine correctly solved, higher levels of legitimate performance on the anagram task cannot explain our effect.

Negative affect. We test whether negative mood shifted significantly after the cheating opportunity by conducting a univariate ANOVA with negative affect at Time 2 as the dependent variable, two between-subjects factors (reality check vs. control; cheater vs. not), and negative affect at Time 1 as a covariate. For the first time in our studies, we find a main effect of cheating on negative affect at Time 2, F(1,198)=14.94, p<.001,  $\eta^2_p=.07$ ; participants who cheated reported *lower* levels of negative affect than those who did not, controlling for condition and baseline negative affect. There is no significant effect for condition (Reality check vs. Control), or for the interaction between cheating and condition, indicating that being made aware that the experimenters knew participants could cheat does not influence negative affect.

Self-satisfaction. The same pattern emerges for self-satisfaction. An ANOVA with self-satisfaction at Time 2 as the dependent variable, and the two between-subjects factors (reality check vs. control; cheater vs. not) found a main effect of cheating on self-satisfaction at Time 2, F(1,199)=85.39, p<.001,  $\eta^2_p=.30$ , such that those who cheated had higher levels of self-satisfaction than those who did not, controlling for condition (see Figure 4). Note that we could not control for baseline self-satisfaction in this analysis, as we only measured it after the cheating opportunity. We found no interaction between cheating and condition, F(1,198)=1.06, p=.31,  $\eta^2_p=.01$ . However, the main effect for condition approached statistical significance, F(1,198)=2.60, p=.11,  $\eta^2_p=.11$ , indicating that being confronted with the experimenters' awareness that cheating was possible slightly increased levels of self-satisfaction for those in the reality-check condition. A post-hoc exploration revealed that this effect for condition was primarily driven by a difference among cheaters in the reality-check condition as compared to

the control condition, t(199)=1.91, p=.057. In other words, for cheaters, being confronted with the fact that the experimenters knew they were cheating increased self-satisfaction, as compared to cheaters in the control condition (see Figure 3).

#### **General Discussion**

Existing models of ethical decision making have assumed that unethical behavior triggers negative affect and that the negative affective consequences of engaging in unethical behavior promote ethical decision making. Our findings challenge that assumption and demonstrate that unethical behaviors may not only fail to trigger *negative* affect, but can in fact trigger *positive* affect. In two studies, we found that individuals predict that they will feel higher levels of negative affect (and lower levers of positive affect), when they forecast how they will feel after engaging in unethical behavior. This misprediction persists even when individuals forecast how others will feel after engaging in unethical behavior.

In an additional four studies, we found that participants who cheated experienced more positive affect (and no more negative affect, and, in one case, lower levels of negative affect) than those who did not cheat. We term this effect the cheater's high. Our documented pattern of results helps to explain otherwise puzzling unethical behavior, such as the finding that people often cheat even for trivial sums of money and that many cheating behaviors are fairly insensitive to the economic costs and benefits of cheating (Mazar, et al., 2008).

#### **Theoretical Contributions**

Existing models of ethical decision making presume that unethical behavior triggers negative feelings and that this prospect curbs unethical behavior. Our findings challenge this assumption and highlight the importance of incorporating emotion in ethical decision making research (e.g., Gaudine & Thorne, 2001; Schweitzer & Gibson, 2008; Warren & Smith-Crowe,

2008). In addition to considering the material benefits and risks related to unethical behavior, the psychic costs *and benefits* should be considered. The cheater's high that we document offers a potential explanation for the puzzling finding that unethical behavior is so pervasive and persistent, even when the stakes are low and the benefits are negligible (Mazar, et al., 2008).

Our results also contribute to research on the temporal nature of morality (Tenbrunsel, et al., 2010), highlighting that, though the "should" self is activated when people make predictions about how they will feel after engaging in unethical behavior, and assume it will be negative, in the moment when unethical behavior occurs, the "want" self dominates the "should" self (Bazerman, et al., 1998; Tenbrunsel, et al., 2010). People not only succumb to immediate temptation (Mead, et al., 2009), allowing visceral, self-interested impulses to prevail (Loewenstein, 1996), but also enjoy a hedonic experience associated with meeting those visceral urges (Loewenstein, 1996).

Our findings also relate to the literature on affective forecasting (Gilbert, et al., 2002; Wilson & Gilbert, 2003). Predicting the affective consequences of decisions may be more complicated than we intuitively believe (Barsade & Gibson, 2007; Loewenstein & Lerner, 2003; Schwarz, 2000), and future work should explore affective forecasts related to both unethical and ethical decision making.

Finally, our results also deepen our understanding of the consequences of unethical behavior. Research on ethical behavior has been dominated by work focused on predictors rather than outcomes (Tenbrunsel & Smith-Crowe, 2008). By demonstrating a previously unidentified positive outcome of unethical behavior, our findings underscore the importance of examining consequences of unethical behavior in moral psychology more generally.

#### **Limitations and Directions for Future Research**

Several promising future research avenues emerge from this research and build on its limitations. First, future work could examine whether the positive affect people experience after cheating may motivate them to continue cheating in the future. A growing body of research in behavioral ethics has identified a number of psychological processes that allow individuals to easily "stumble into bad behavior" (Bazerman & Tenbrunsel, 2011), and may thus motivate further unethical acts. For instance, this research has found that individuals are more likely to behave unethically when they have recently had an opportunity to assert what good people they are (Monin & Miller, 2001), when the transgressions are trivial enough that people are able to undertake them while maintaining a positive self concept (Mazar, et al., 2008), when people can become acclimated to unethical behavior slowly (Gino & Bazerman, 2007), when they are motivated by goals (Schweitzer, Ordóñez, & Douma, 2004), when the context is ambiguous (Schweitzer & Hsee, 2002), or when people can use others to help establish a justification for their behavior (Gino, Gu, & Zhong, 2009).

Our results suggest that the positive affect boost that results from unethical behavior may further grease the gears that facilitate the persistence of bad behavior across time. In our studies, we only considered situations where participants had the opportunity to behave unethically a single time. The harmful effects of the cheater's high may be magnified over time as individuals are often able to rationalize unethical behavior (Bazerman & Tenbrunsel, 2011) and then experience affective consequences that reinforce it. Thus, future studies could examine whether initial unethical behavior may prompt individuals to engage in additional unethical behavior because of the positive affect they experience after cheating. This "high" might become a desirable state in and of itself.

To date, the fields of behavioral ethics and criminology have paid scant attention to this possibility and, more broadly, to the potential consequences of unethical behavior. In one exception using first-hand accounts, Katz (1988) describes the emotional seduction or "sneaky thrills" that involve many crimes, from joyriding in stolen cars to vandalism to shoplifting affordable goods, and notes that in many first-hand descriptions of these events, the euphoria of successfully getting away with the crime trumps any material gain from it. Other criminology researchers also note that "getting away with it" feels good (Matza & Sykes, 1961; Moore & Gullone, 1996; Scully & Marolla, 1985). No prior work, however, has systematically investigated the affective content of "sneaky thrills" or "duping delight" (DePaulo, et al., 2003). In our research, we have documented the positive affective consequences of unethical behavior. However, we have not studied whether a sense of thrill could motivate dishonesty. This seems a fruitful and important question for future work.

We are not suggesting that *all* unethical behavior will lead to positive affect. The type of unethical behavior we examine in these studies, as well the behavior referred to in the work we draw on to develop our hypotheses, all involve actions that are prohibited and contraventions of moral and social norms. However, they did not involve direct harm to an identifiable other and they do not reflect an attempt to comply with a request from another person (e.g., an authority figure), ), as was the case in the few studies that demonstrated negative affective consequences of unethical behavior (Brock & Buss, 1964; Buss & Brock, 1963; Okel & Mosher, 1968; Ring, et al., 1970). Future studies could test whether these types of behaviors will lead people to experience negative rather than positive affect, as suggested by prior work. Similarly, further work could explore the role of other factors that may moderate the cheater's high. For instance, particular individual differences such as a person's self-importance of moral identity (Aquino &

Reed, 2002) or dimensions of a decision's moral intensity (Jones, 1991) such as the magnitude of its consequences and the social consensus regarding the ethicality of the act may influence the direction and strength of our findings.

Future work should also investigate the long-term affective consequences of unethical behavior. In the short term, the "want" self, driven by impulsive behavior is less motivated to behave ethically (Tenbrunsel, et al., 2010) and more likely to experience the cheater's high. As individuals transition to the "should" self, over time and perhaps through self-reflection, they may become more likely to attend to ethical considerations and feel differently about their actions. Perhaps prompting individuals to ruminate about their actions may increase the negative affect that individuals experience from engaging in unethical behavior. This possibility is consistent with prior work that has linked unethical behavior and negative affect in recall studies (e.g., Baumeister, Stillwell, & Heatherton, 1995; Tracey & Robins, 2006).

#### Conclusion

Across six experiments, we find that although people expect to experience negative affect after engaging in unethical behavior, they actually experience a boost in positive affect. These findings challenge existing models of ethical decision making and offer cause for concern. Many ethical decisions are often made privately and are difficult to monitor. Individuals who recognize, perhaps from experience, that they can derive both material and *psychological* rewards from engaging in unethical behavior may be powerfully motivated to behave unethically. It is imperative that we develop our understanding of how emotions influence our moral behavior, how our moral behavior influences our emotions, and how people expect these relationships to work.

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## Author Note

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Figure 1. Study 2 means ( $\pm 1$ SE) of positive affect after the cheating opportunity for cheating and honest participants.

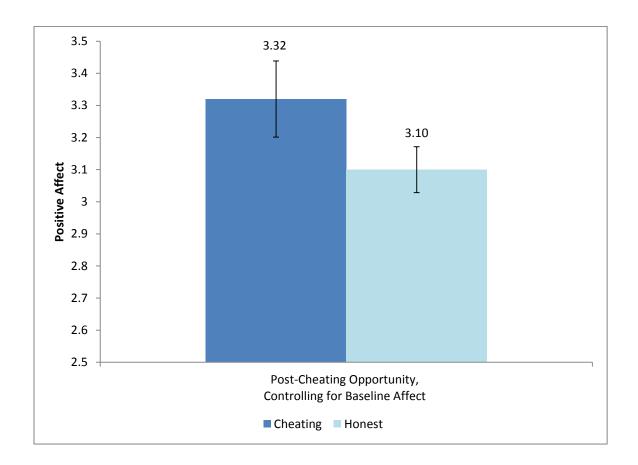


Figure 2. Study 4 means (±1SE) of positive affect pre-and post-study, by cheating condition.

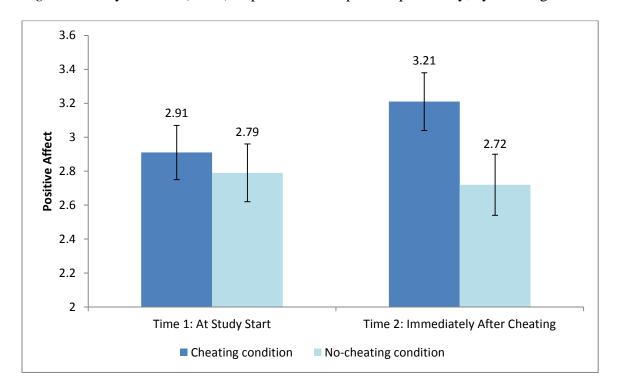


Figure 3. Study 5 means (±1SE) of cheaters and non-cheaters' positive affect, negative affect, and self-satisfaction, post-cheating.

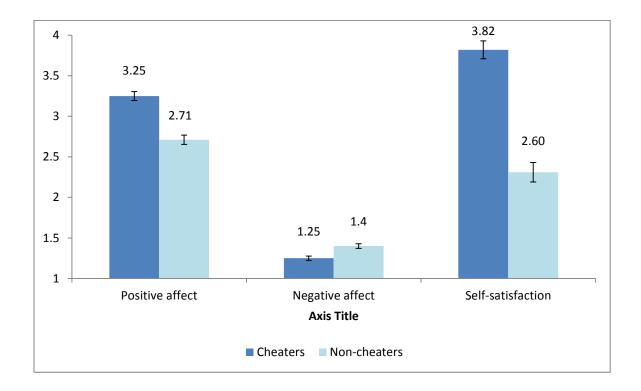


Figure 4. Study 5 means (±1SE) of cheaters and non-cheaters' and self-satisfaction, by reality check condition.

