Consistency Versus Licensing Effects of Past Moral Behavior

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Abstract

Why does past moral behavior sometimes lead people to do more of the same (consistency), whereas sometimes it liberates them to do the opposite (licensing)? We organize the literature on moderators of moral consistency versus licensing effects using five conceptual themes: construal level, progress versus commitment, identification, value reflection, and ambiguity. Our review reveals that individuals are more likely to exhibit consistency when they focus abstractly on the connection between their initial behavior and their values, whereas they are more likely to exhibit licensing when they think concretely about what they have accomplished with their initial behavior -- as long as the second behavior does not blatantly threaten a cherished identity. Moreover, many studies lacked baseline conditions (“donut” designs), leaving it ambiguous whether licensing was observed. And although many proposed moderators yielded significant interactions, evidence for both significant consistency and balancing simple effects in the same study was nearly nonexistent.

Keywords: moral credentials, moral credits, compensation, balancing, identity, self-regulation
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**THE PUZZLE OF MORAL LICENSING**

Why does past behavior sometimes lead people to do more of the same, while at other times it liberates them to do just the opposite? Decades of research in social psychology support the notion that individuals have a strong drive towards consistency (e.g., Beaman et al. 1983; Burger 1999; Festinger 1954; Gawronski & Strack 2012). For example, inciting people to help a little (e.g., putting a small sign in their window) causes them to help more at a later stage (e.g., display a large sign on their front lawn), the “foot-in-the-door” effect (Freedman & Fraser 1966). And yet in the last 14 years (since Monin & Miller 2001), numerous studies have demonstrated what seems like the exact reverse phenomenon: Acting in one direction enables actors to later do just the opposite. For example, getting to disagree with racist statements (Monin & Miller 2001) or express a preference to vote for Obama (Effron et al. 2009) licensed individuals to express a preference for hiring a White person for another job; getting to recall past moral actions licensed individuals to express lower prosocial intentions (Jordan et al. 2011); and getting to choose green products in an online store licensed individuals to cheat more on a subsequent task (Mazar & Zhong 2010).

Despite their recent introduction to the literature, licensing effects are now widely documented and apparently reliable: A recent meta-analysis of 91 licensing studies revealed an overall 95% confidence interval for Cohen’s $d$ ranging from .23 to .38 (Blanken et al. 2015). Furthermore, when Ebersole et al. (2015) attempted to replicate the first study in this tradition (Monin & Miller 2001, Study 1) across many labs and 3,134 participants, they observed a reliable licensing effect, with a 95% confidence interval for $d$ ranging from .08 to .21. Licensing effects have also been demonstrated in naturally occurring settings (Hoffman et al. 2014) and discussed outside of psychology, in marketing (Huber et al. 2008), management (Klotz & Bolino 2011).
Consistency versus Licensing


On the face of it, these licensing findings present a striking contradiction with the numerous demonstrations of consistency mentioned above, and this remains the largest conundrum in the emerging licensing literature. Although reviews have speculated about reasons for the divergent effects (e.g., Blanken et al. 2015; Effron & Conway in press; Huber et al. 2008; Merritt et al. 2010; Miller & Effron 2010), only recently have authors started testing moderators to explain when past behavior produces consistency versus licensing (see Supplemental Table). To name just three examples, Conway and Peetz (2012) posited that recalling recent behavior leads to licensing, whereas recalling more distant behavior leads to consistency; Cornelissen et al. (2013) proposed that focusing on consequences leads to licensing, whereas focusing on rules leads to consistency; and Brown et al. (2011) suggested that licensing only occurs when the behavior being liberated is highly rationalizable. In a few years, we have gone from an unanswered question to an over-abundance of sometimes conflicting answers.

The main goal of this paper is to remedy this situation by reviewing these multiple proposed moderators in one place to facilitate comparison and highlight underlying themes common to seemingly disparate mechanisms. To circumscribe the problem, we focus on cases of sequential behavior in the domain of important societal values (e.g., generosity, honesty, racial tolerance, respect for the environment), sometimes referred to as “moral licensing.”

A COMMON FRAMEWORK FOR SEQUENTIAL BEHAVIOR PARADIGMS

We first propose a common nomenclature to facilitate comparison and integration of the papers reviewed here, and to remove ambiguity in discussing findings in the rest of this paper.
We review others’ work through this lens, substituting the authors’ language with our own for uniformity.

**Defining Terms in Sequential Behavior Paradigms**

We call **Sequential Behavior Paradigms** experimental situations in which an individual faces a choice in the context of relevant previous behavior. This "context" can range from behavior that was just performed moments before to prompted recollections of past behavior. "Relevance" ranges from the domain-specific, when the present choice is the same as one faced earlier (helping yesterday, helping today), to the global, when both choices loosely relate to the same goal of being a moral person (e.g., buying green products, not cheating). The **initial behavior** (or behavioral recollection/intention) comes first in the sequence, typically constitutes the independent variable, and can be **positive** (e.g., disagreeing with sexist statements, engaging in prosocial behavior) or **negative** (e.g., cheating, harming another)¹. One methodological challenge is to ensure that participants are randomly assigned to the initial behavior and do not self-select to perform it; this is often achieved by giving participants in the positive initial behavior condition the opportunity to do an easy good deed, and making sure most of them do it, while participants in a control condition are deprived of this opportunity. Increasingly authors rely on experiential recall manipulations where they simply ask participants to recall and write about a time they acted morally or immorally. Some studies also include a **baseline** condition with a neutral initial behavior. Monin and Miller (2001), for example, pitted an initial positive behavior (appointing a woman or African American to a position) against a baseline control (appointing a White man out of five White male candidates). Many studies, especially ones that

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¹ We omit from our analysis of sequential behavior, effects that have nothing to do with the valence of the initial behavior, such as habit or variety seeking.
involve recalling past behavior, omit the baseline control, and only compare positive and negative behavior, making interpretation difficult, a point we return to below.

The **target behavior** (or behavioral opportunity) follows the initial behavior, serves as the dependent variable, and can also be positive (e.g., donating to charity) or negative (e.g., cheating). For the simplicity of our argument, however, we will focus on whether the target behavior appears **more positive** (donating more, cheating less), or **less positive** (donating less, cheating more). Figure 1 illustrates the following potential relationships between the initial and the target behavior: consistency (positive or negative) and balancing (licensing or compensation).

**The Role of Conflicting Motives**

Although licensing and compensation are both instances of balancing (in different directions), it is important to distinguish them theoretically, as they likely rely on different processes. Compensation fits into a longstanding homeostatic view of self-regulation which posits that when individuals fall short of a goal, they are motivated to deploy effort to repair and compensate for this failure (e.g., guilt, Baumeister et al. 1994; self-completion, Brunstein & Gollwitzer 1996; cleansing, Tetlock et al. 2000; bolstering, Sherman & Gorkin 1980).

Presumably, moral licensing is the more counter-intuitive aspect of balancing, because it is less straightforward why doing the right thing could liberate people to do less good, and indeed demonstrations of licensing were rare before Monin and Miller (2001; but see Nisan 1991; Nisan & Horenczyk 1990). Although licensing is construed by some as merely the inverse of compensation (compensation involves renewed effort toward a goal, whereas licensing sometimes involves a dampening of goal striving), it can also be produced via qualitatively different psychological processes (moral credits vs. moral credentials; see sidebar; for reviews see Effron & Monin 2010; Merritt et al. 2010; Miller & Effron 2010).
Licensing results from the fact that individuals pursue multiple, sometimes conflicting goals (e.g., to advance one’s career, to be prosocial). For licensing effects to occur, there must be a conflict of motives in the target behavior (e.g., between self-interest and doing the “right” thing) that manifests as temptation or suspicion. In the temptation case, an individual wants to do something personally beneficial (e.g., refuse to help, cheat on test) but is torn by a conflicting motive (to be helpful, to be an honest person). In this case, prior positive initial behavior can license people to yield to temptation by adding to the positive side of the moral ledger (moral credits). In the suspicion case, the conflict is of an attributional nature (Kelley 1973): an individual wants to do something for legitimate reasons (e.g., suspend a misbehaving student) but is concerned that this choice may actually be, or appear to others to be, motivated by an illegitimate motive (e.g., racism, if the student is African American). Here, positive initial behavior can dispel causal ambiguity and reduce the potential for suspicion by making the illegitimate motive less credible (moral credentials).

Whereas we posit that either temptation or suspicion is necessary to observe licensing, neither type of conflict is required for compensation. Given that licensing and compensation potentially rely on such different processes, it is important to tease them apart, which requires including a baseline condition. In practice, many empirical tests of sequential effects of behavior do not include a baseline condition (see Supplemental Table), and only contrast positive versus negative initial behavior (which only allows conclusions about balancing). Moving forward, we will refer to such designs as “donut” designs, to capture the fact that they are missing a crucial element in their middle (see Figure 1).²

² Although one may argue that there are cases where positive and negative initial behavior are the only options (e.g., either helping or refusing to help when one is asked for help), this ignores the fact that choice in the target behavior could have been different if no request had been formulated as the initial behavior (baseline).
We propose two explanations for the surprising prevalence of donut designs. The first, theoretical, is that authors conceive of the initial behavior manipulation as different dosages of a (unidimensional) treatment, where the “moral” condition is the high dosage and the “immoral” condition is the low dosage. With this framing, a baseline seems as unnecessary as a “medium” dosage would be to test a presumed linear effect of dosage. We propose that the dosage analogy breaks down here as “moral” and “immoral” conditions could bring about very different psychologies relative to a baseline with no initial behavior whatsoever. A second explanation, methodological, pertains to the reliance on online studies and “recall a time” manipulations in lieu of actual behavior. In such paradigms, the easiest manipulation is to simply replace the word “moral” with “immoral” in the prompt. Many of the donut designs discussed below share this feature.

The Problem with Donut Designs

In the case of sequential behavior paradigms, donut designs typically take the form of contrasting a positive and a negative initial behavior, with no baseline. To appreciate the problem with drawing conclusions from such a design, Table 1 presents hypothetical outcomes of such a study, where numbers reflect means on a measure of behavior positivity (e.g., amount donated, or the number of questions on which participants did not lie). Assuming that the differences observed between these means are significant, how would we interpret these patterns in terms of consistency, licensing, or compensation? **Outcome 1** strongly suggests consistency. But the absence of a baseline makes it unclear where this consistency originates. If a baseline had been added and its mean was 4 (assuming this mean is significantly different from the other two), this would suggest positive and negative consistency. But a baseline at 3 would suggest instead that the effect is entirely due to positive consistency, whereas a baseline at 5 would suggest it is due
to negative consistency. **Outcome 2** presents the same ambiguity: it is impossible to know whether a baseline would have fallen in the middle at 4, suggesting both compensation and licensing, or might have been around 3, suggesting only compensation, or around 5, suggesting only licensing. The problem is that many authors have used such donut designs to contrast consistency and balancing, which such designs do effectively, but have then have slipped to making claims about consistency versus licensing, which they are not in a position to make -- because the pattern in Outcome 2 could entirely be driven by compensation, with no trace of licensing. It is not even straightforward how **Outcome 3** should be interpreted. This is typically treated as a null result, and especially in the context of testing moderators, as evidence of “no balancing” and/or “no consistency.” But if we allow for potentially divergent effects for positive and negative initial behavior, such a conclusion is not warranted in the absence of a baseline. A baseline at 3, in this case, would reveal a consistency effect for the positive initial behavior and a compensation effect for the negative initial behavior -- there is no strong theoretical reason for both effects to necessarily work in lockstep. Conversely, a baseline at 7 would suggest a licensing effect for the positive initial behavior, and a consistency effect for the negative initial behavior. Thus, donut designs raise serious issues when interpreting results.

As noted by Blanken et al. (2014), a more subtle but equally problematic disregard of the value of the control condition is at work when researchers include a control condition in the design but do not include it in pairwise comparisons, and instead only report an omnibus $F$, which precludes drawing conclusions about whether any observed effect reflects compensation, licensing, or both, or when they do not amass sufficient statistical power to detect significant differences from the baseline. Thus, authors should include a baseline condition and ensure they
have enough statistical power to test for licensing effects, and not simply report balancing as evidence of licensing.

**Donut Designs and Moderation**

More than 1 in 4 studies we review omit a baseline condition (see Supplemental Table), which poses particular challenges for the task of this paper. To study the role of potential moderators of licensing versus consistency, the ideal design for the question at hand is a 2x2 factorial, where one variable is the prior behavior (positive versus baseline), and the other variable is the proposed moderator. Ideally, one would then demonstrate consistency and licensing within the same design by showing significant simple effects (in different directions) within the levels of the moderator, and establish the role of the proposed moderator with a significant interaction. Only such a design can reveal distinct conditions under which previous behavior leads to licensing and consistency. As we will see, such an ideal design is actually surprisingly rare in the literature. In summary, given the common reliance on donut designs, many reported licensing effects in the literature could in fact result from compensation processes, something to keep in mind as we review findings in the rest of this paper.

**TESTS OF PROPOSED MODERATORS GROUPED BY FIVE THEMES**

We reviewed studies proposing to test moderators of consistency and licensing. Thus, we omitted numerous published studies that have separately demonstrated consistency, licensing, or balancing without including a moderator. Also, we focused on moderation studies where the initial behavior could be construed as having moral significance (e.g., recalling a moral behavior, imagining buying green products, expressing a preference for Obama). We did not apply the same restriction to the target behavior, though in many cases it did have moral relevance. Typical target behaviors include cheating, lying, donating, volunteering, or allocations in a dictator game.
Because investigators of moderators approach the question with such different assumptions, we could not propose a priori an overarching framework that explained even a majority of the results presented -- and doing so would have required making too many unwarranted judgment calls about moderating variables not measured, manipulated, or even discussed by the original authors (e.g., whether participants construed their initial behavior as progress or commitment). Instead we have organized the reviewed papers into five themes: (1) Level of Construal, (2) Progress versus Commitment, (3) Identity Relevance, (4) Value Reflection, and (5) Ambiguity (see Table 2). From a bird’s eye view, a thread running through all these studies is the importance of whether a connection is established between one’s behavior (initial or target) and one’s values and identity, as a function of contextual cues or pre-existing identification. Yet upon closer examination, enough discrepancies in theoretical approaches emerge (especially regarding the meaning of identification) to prevent us from collapsing these five themes into one. We return to the commonality across themes in the discussion section.

**Level of Construal**

A number of proposed moderators of consistency versus licensing boil down to whether participants are prompted to think about how their initial behavior relates to abstract values and principles (leading to consistency), or whether instead their initial behavior suggests concrete choices and tangible outcomes (leading to balancing). We briefly review Construal Level Theory (CLT), then describe the studies that have proposed a relevant moderator.

**Construal Level Theory.** CLT (Trope & Liberman 2003, 2010) begins with the notion that because people only directly experience the present time and place, they must transcend the present moment to maintain long-term goals and construct a coherent sense of identity, and they do this with mental construal. High-level (abstract) construals focus on decontextualized and
essential features of objects based on stable, cross-situational properties, whereas low-level (concrete) construals include more specific and contextual details based on more temporary properties. High-level construals lead to a focus on reasons and superordinate goals (“Why?”), whereas low-level construals lead to a focus on specific subordinate means and subgoals (“How?”; see also Vallacher & Wegner 1987). The farther something is perceived to be from direct experience (e.g., in terms of space, time, or likelihood), the higher its level of construal.

CLT makes three predictions about the relationship between values and behavior. First, individuals behave more in line with their overarching values or identity concerns when thinking abstractly, and more in line with the feasibility constraints of performing a particular behavior when thinking more concretely (Eyal et al. 2009). Second, individuals thinking abstractly are more likely to see their behavior as reflective of their underlying personality or values. For example, individuals who refused to host a blood drive conceived of themselves as more selfish (and were more likely to refuse to help with a subsequent smaller request -- a case of negative consistency) when they had first been primed with an abstract construal mindset than a concrete one (Henderson & Burgoon 2014). Thus, abstraction promotes a more coherent self-representation, which leads to more behavioral consistency. Third, CLT predicts that individuals exhibit better self-control if they adopt a higher-level construal when facing temptations about important goals, by making them weight personal values and long-term goals more than short-term gratification (Fujita et al. 2006). In summary, an abstract mindset prompts a focus on superordinate goals and values, leading to consistency, whereas a lower-level focus on actions and consequences should lead to balancing.

**Abstract versus concrete construal of initial behavior.** Conway and Peetz (2012) proposed that conceptual abstraction moderates whether past behavior leads to consistency or to
licensing effects: Thinking of past moral behavior concretely should focus attention on the act itself, leading to balancing, whereas thinking of it abstractly should highlight the underlying reasons for the behavior (values and superordinate goals), leading to consistency. Three studies tested these predictions. In one study, participants who recalled their recent moral acts (i.e., concrete construal) reported less willingness to volunteer in the future than participants who recalled their recent immoral acts (balancing), whereas participants who recalled their moral behavior that was over a year old (i.e., abstract construal) reported more willingness to volunteer than participants who recalled their distant immoral behavior (consistency). The balancing effect replicated in subsequent studies but the consistency effect did not. However, because the first and third studies relied on donut designs (i.e., no baseline condition) and the second used recall of a friend’s behavior as a comparison condition, it is impossible to confidently attribute this balancing pattern to licensing, compensation, or both.

**Focusing on principles versus consequences.** Cornelissen et al. (2013) proposed that the effects of past moral actions on future moral behavior depend on participants’ broad ethical outlook. They suggested that consequentialism, because it evaluates the rightness of an act through cost-benefit analysis, allows for flexibility and trade-offs, leading to balancing, whereas deontology, with its focus on rigorous application of principles across situations, promotes consistency. In the CLT framework, an outcome focus is consistent with a more concrete representation of moral behavior, whereas a principles focus is consistent with a more abstract construal of moral behavior. In three studies, participants with an outcome-focused mindset showed a balancing pattern, whereas those with a rule-based mindset showed a consistency pattern. For example, in Study 3, participants cheated more after remembering helping than hurting someone (balancing in outcome focus), but cheated less after remembering following
than breaking rules (consistency in rule focus). Moreover, in the outcome-based conditions, participants prompted to recall ethical behavior felt more moral than participants recalling unethical behavior, and this difference predicted the difference in cheating; this mediation was not significant in the rule-based condition. Study 1 was a donut design, but a baseline condition was included in Studies 2 and 3; however, it did not differ significantly from any of the four conditions in the two by two in either study, leaving it ambiguous whether the observed balancing resulted from licensing or compensation.

**Intentions versus actions.** The data is more ambiguous when it comes to whether participants get to talk about things they have done in the past (actions, presumably concrete) versus things they will do in the future (intentions, presumably abstract). On one hand, and consistent with the other findings in this section, Weibel et al. (2014) found that recalling completed actions leads to balancing (donut design), whereas expressing intentions of future actions leads to consistency. On the other hand, Cascio & Plant (2015) find that merely imagining future moral acts can grant one moral credits, and licenses morally-questionable behavior; so it seems that expressing intentions can sometimes lead to licensing (see also Clot et al. 2013, 2014a; Brown et al. 2011), perhaps because intentions can also be formulated in concrete terms. Thus, more research is needed to determine the conditions under which anticipated future moral acts will lead to licensing or consistency.

**Summary of moderation by construal level of the initial behavior.** The studies reviewed in this section converge on the conclusion that initial behavior that is construed concretely (e.g., in terms of the specifics of the act itself, or outcomes) tends to lead to balancing, whereas initial behavior that is construed abstractly (e.g., in terms of higher order values or rules)
tends to lead to consistency. Notably, despite demonstrating balancing, these studies on the whole provide little direct evidence for licensing.

**Progress versus Commitment**

Fishbach and colleagues’ research on the dynamics of self-regulation (Fishbach et al. 2009; Fishbach et al. 2014), and in particular their use of the distinction between highlighting (i.e., consistency) and balancing (Dhar & Simonson 1999), provides a compelling framework for understanding consistency and licensing effects. Fishbach and colleagues argue that the same movement toward a goal can be perceived either as evidence of goal progress or goal commitment, with important consequences for subsequent behavior. If individuals construe goal-consistent action as evidence of commitment to a goal, they renew their efforts toward this goal (“highlighting”), whereas if individuals construe it as having made progress toward a goal, they expend less effort toward this goal, and instead switch to pursuing unattended goals (“balancing”). Using this framework, Fishbach et al. (2006) interpret the Monin and Miller (2001) licensing effect thus: “In our terms, nondiscriminatory behaviors signal that the goal is met and therefore they justify incongruent, discriminatory behavior”3 (p. 240). However, they also argue that the Monin and Miller (2001) experiment would have yielded consistency instead of licensing if participants had connected their initial behavior with their values (“...our analysis further implies that when individuals attribute the meaning of their initial behavior to their central values and beliefs, they are more likely to infer commitment to egalitarian values and avoid discriminatory action,” p. 240).

Besides stable individual differences in the tendency to adopt a progress or commitment approach to self-regulation (Zhang et al. 2007), several factors influence whether the same goal-consistent actions are viewed as progress or commitment (Fishbach et al. 2009; Fishbach et al.,

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3 Balancing in Fishbach et al.’s model best corresponds to a moral credits process (see sidebar).
2014). For example, experimenters can manipulate the types of questions being asked (e.g., “To what extent do you feel committed to [feel you’ve made progress on] your academic tasks after studying all day?”, Fishbach & Dhar 2005). Another factor is the salience of superordinate goals. Consistent with CLT, the degree to which individuals interpret goal-consistent actions as evidence of progress or commitment depends on whether they pay attention to the specific (concrete) action and subgoal, or to the superordinate (abstract) longer-term goal. If the superordinate goal is made salient (e.g., via situational priming), sufficient goal-consistent actions signal commitment to this goal (Fishbach et al. 2009) which leads to highlighting. If the superordinate goal is not made salient, sufficient goal-consistent actions lead to balancing (Fishbach et al. 2006).

Differences in individuals’ pre-existing commitment certainty also determine whether they look for evidence of commitment or progress. Individuals who are uncertain of their commitment to a goal are more likely to ask themselves about their commitment, and thus, following the logic of self-perception (Bem 1972), to see movement towards the goal as evidence of commitment, leading to consistency. For novices, focusing on the ground already covered is therefore motivating (revealing a newfound commitment), whereas focusing on how much work remains to be done can be demotivating (showing how far they are from the goal). In contrast, experts or already-committed individuals are not wondering about their commitment, rather they are concerned about making progress toward the goal. For them, focusing on the ground to be covered is more motivating (Koo & Fishbach 2008; Fishbach et al. 2014); conversely, feeling that they have made sufficient progress may allow them to temporarily turn their attention to other goals. Importantly, Fishbach et al.’s empirical demonstrations of the interaction between commitment certainty and progress manipulations speak more to generic
balancing than to licensing, because they primarily rely on donut designs, where we cannot discern whether the balancing observed with high-commitment participants results from compensation, licensing, or both.

**Applying the model to moral licensing.** Consistent with Fishbach’s theorizing, Susewind and Hoelzl (2014) demonstrated that construing behavior as evidence of progress toward a moral value leads to balancing, whereas construing behavior as evidence of commitment to a moral value leads to consistency. In one study, participants shopped in a virtual store with a majority of green (positive initial behavior) or conventional (baseline) products, and then reported their likelihood of engaging in future prosocial behaviors. In another study, students brainstormed on how to improve their own lives (baseline) or that of disabled students on campus (positive initial behavior) and then engaged in a dictator game with a random peer. In both studies, leading questions manipulated participants’ focus on goal progress or commitment: When participants focused on progress, they showed a licensing pattern, whereas when they focused on commitment, they showed a (positive) consistency pattern.

**Summary of moderation by progress versus commitment.** When people frame their initial behavior as reflecting commitment to their moral values, they are more likely to show consistency, whereas when they frame their initial behavior as evidence of progress toward their goal they are more likely to exhibit balancing. There are obvious parallels between CLT (reviewed above) and Fishbach and colleagues’ model: in particular, progress is often construed at a more concrete level, while commitment is construed at a more abstract level (see Fishbach et al. 2006). Thus, the demonstration by Weibel et al. (2014; reviewed in the CLT section) that intentions lead to consistency, whereas completed actions lead to balancing, is consistent with Fishbach’s model: completed actions could be construed as progress toward the goal allowing
for licensing, whereas future intentions could highlight one’s commitment to the goal producing consistency. The difficulty with making this parallel more broadly is that in the absence of explicit manipulations of progress versus commitment framings, it is difficult to determine whether participants in other studies construed their initial behaviors in terms of progress or commitment.

Identification

Some scholars (e.g., Meijers 2014) have argued that licensing only occurs when individuals are not particularly identified with the cause being tested by the target behavior, and that when identification is high, a congruent initial behavior would have little licensing effect, and could even lead to consistency.

Identification versus commitment. At first glance, the notion that highly identified individuals show less licensing than less identified individuals contradicts Fishbach and colleagues’ model, which predicts that individuals confident about their commitment see movement towards the goal as progress, prompting balancing, whereas individuals less certain about their commitment see the same movement as evidence of commitment, prompting highlighting. Thus, if one equates high identification with high commitment, the two models could seem to produce diametrically opposed predictions. But a closer look reveals some important differences that may account for these divergent predictions.

First, Fishbach and colleagues’ model does not make direct predictions about the difference between low- vs. high-commitment individuals at a particular level of progress. Instead, their model pertains to the meaning of low vs. high progress for committed individuals, and the meaning of low vs. high progress for uncommitted individuals, acknowledging that committed individuals likely have a higher baseline motivation regardless of progress. By
choosing to focus on the effect of progress within each commitment level, Fishbach and colleagues remain relatively agnostic about the effect of commitment at each stage of progress.

Second, Fishbach compares the effects of an initial behavior for individuals “certain” of their commitment (e.g., prior donors to a cause, Koo & Fishbach, 2008), and individuals who are “uncertain” (e.g., those who never donated to the cause); the studies reviewed below instead typically rely on self-reported identification, which captures variance between people who declare caring more and people who declare caring less about a value or cause. So whereas Fishbach and colleagues posit commitment as an epistemic state (a crucial framing to explain why uncommitted individuals would be motivated to learn what their commitment is), here identification refers more to an attitudinal dimension -- such that low-identification individuals might be quite certain that they do not care about an issue. Thus, the psychology attributed by Fishbach and colleagues to the uncommitted people (seeking to find out if they are committed because they aren’t sure whether they value the goal) is very different from that attributed below to the low-identification people, who know full well they do not value the goal, and are happy to find an excuse to slack off. This helps explain why Fishbach’s model predicts consistency for low-commitment individuals, whereas the papers reviewed below predict licensing for low-identification individuals.

Third, many of the demonstrations in the commitment versus progress literature involve donut designs, which preclude isolating the role of licensing. Although the model predicts balancing for highly-committed individuals, and several studies support this prediction (e.g., Finkelstein & Fishbach 2012; Koo & Fishbach, 2008), it is easier to explain this balancing in terms of compensation than licensing: When highly committed individuals see that little progress is made towards the goal, they are especially motivated to increase goal-consistent actions.
Thus, Fishbach’s model predicts more balancing for highly-committed individuals (which could largely be driven by compensation), whereas the studies reviewed below predict that licensing is more likely to occur for low-identification actors. For example, people who strongly identify as environmentalists should be more likely to increase their goal consistent actions when they feel they haven’t done enough (compensation), but should be unlikely to purchase products they know harm the environment, no matter how many environmentally friendly behaviors (e.g., recycling) they have engaged in. In this view, it is people who do not really care about the environment (low identification) who should be all too happy to slack off if they can point to a token behavior (e.g., recycling) that they accomplished towards that goal (licensing).

**Pro-environment identity.** Testing these predictions, Meijers (2014) demonstrated that participants’ self-reported pro-environmental identity moderated the effect of imagining buying environmentally-friendly shoes or clothing (versus control non-green products) on their subsequent expression of pro-environment emotions, concerns, and intentions. Participants who had a strong pro-environmental identity were not affected by the green purchase: they always expressed environmentally-friendly intentions or concerns. But after individuals with a weaker pro-environmental identity chose the green products, they expressed lower green intentions and concerns than after buying conventional products, suggesting a licensing pattern. These findings demonstrate that when the target behavior is very explicitly a direct test of the value (e.g., rating “I would be willing to stop buying products from companies guilty of polluting the environment even though it might be inconvenient for me.”), licensing occurs for low identifiers, whereas high identifiers tend to refrain from explicit violations of the value.

Similarly, Clot et al. (2014a) investigated whether pro-environmental identity interacted with imagining engaging in voluntary versus mandatory pro-environmental behaviors to
influence participants’ willingness to donate to an environmental charity. When the initial behavior was voluntary (instead of mandatory), high identifiers did not demonstrate licensing effects, whereas low identifiers did.

**Self-reported egalitarian identity.** Effron et al. (2009, Study 3) showed that allowing (versus not allowing) participants an opportunity to express that they would vote for Obama in the 2008 presidential election subsequently licensed them to favor a White over an African-American community organization in a resource allocation task, but only if they scored relatively high on the Modern Racism Scale (MRS; McConahay et al. 1981), which we translate as being low in identification with egalitarian values. By contrast, individuals lower on the MRS (i.e., high identification with egalitarianism) showed, if anything, a marginally significant effect in the opposite direction (consistency). In other words, for participants who most identified with the value of egalitarianism, reporting their intention to vote for Obama stressed their commitment to fighting prejudice (leading to consistency), whereas for individuals less identified with egalitarianism, voting for Obama seemed good enough, leading to licensing.

**Summary of the moderating effect of identity relevance.** Taken together, these studies suggest that people’s identification with the value or cause tested in sequential behavior paradigms moderates the effect of positive initial behavior on subsequent behavior. Particularly in domains related to morality, where one bad act can impugn one’s reputation (e.g., one racist remark can severely damage one’s reputation), individuals who are highly identified are unlikely to exhibit licensing effects. In contrast, low identifiers may be happy to slack off after demonstrating token commitment to the cause with their initial behavior. Indeed, in all of the studies reviewed in this section, licensing occurred among low identifiers.
Reflecting on the Values Indicated by the Initial Behavior

The next set of studies we review involve situations where individuals are prompted, or have the ability, to draw inferences about their own values or identity from their initial behavior. In these cases consistency obtains when individuals have enough self-control resources to reflect on the correspondence between their values and initial behavior, or are prompted to reflect on their values because of some characteristic of the initial behavior (e.g., how costly it is, whether it is public or private).

**Resource availability versus depletion.** In Joosten et al. (2014), participants recalled a time they did something moral or immoral in their past (donut design) and then completed a task designed to deplete their self-control resources. Participants then faced a conflict between self-interest and helping others in a group task. In two studies, depleted participants were more helpful when they recalled their immoral than their moral behavior (balancing), whereas non-depleted participants were (marginally) less helpful when they recalled their immoral than their moral behavior (consistency). These findings suggest that participants must have enough self-control resources to reflect on the correspondence between their values and behaviors to produce consistency, but that they exhibit balancing when depleted.

**Costliness of initial behavior.** Gneezy et al. (2012) proposed that the key moderator of consistency is the costliness of the initial prosocial behavior: Costly prosocial behavior signals a prosocial identity, leading to consistency, whereas costless behavior does not, leading to no consistency. This model focuses on costliness as a necessary condition for consistency, but it is more agnostic about whether (or why) licensing should occur when no cost is incurred. In Study 1, economics students received an envelope indicating they should have received $5 for the experiment. In a control condition, participants received $5; in a costly condition, they only
received $3 and were told that $2 had been deducted and given to the make-a-wish foundation on their behalf; in a costless condition, they received $5 and were told that an additional $2 was given to the charity on their behalf. When later placed in a task tempting them to lie to a peer to potentially take home more money, relative to the control condition, participants lied significantly less in the “costly” condition, and significantly more in the “costless” condition. Surprisingly (given that they had no say in their $2 being withheld and did not engage in any kind of actual initial behavior⁴), participants in the costly condition also rated themselves as more helpful and less selfish than participants in either of the other two conditions, and the difference in truth-telling between the costly and the costless conditions was mediated by this self-rating of prosocial identity. The authors argue that cost increases consistency by making the initial behavior seem more diagnostic about oneself, leading people to embrace the value indicated by that behavior (cf., Bem 1972; Burger 1999).

**Private versus public initial behavior.** Kristoferson et al. (2014) showed that another moderator of the effect of initial behavior is whether it is public or private. In their studies, individuals who agreed to sign a petition in private or to take a pin home with them were more likely to agree to later donate or volunteer to help the same cause than a baseline group with no prior behavior, suggesting consistency when the initial behavior was private -- but this effect did not obtain when participants signed a petition in front of a group of peers, or when the pin was visibly placed on their clothes (though they did not observe balancing either). A private choice led individuals to reflect on their values, to embrace the identity indicated by the initial behavior,

⁴ The manipulation of “costly prosocial behavior” in this study, which involves experimenters withholding promised pay from participants without their consent, is an odd fit among the type of positive initial behaviors typically used in the licensing and consistency literatures. More research is warranted to determine if participants really construe this as a donation -- or instead as a capricious tax imposed by an untrustworthy experimenter, and whether self-ratings as less selfish in this condition amount to a statement about the experimenter’s greedy nature by comparison.
and to display consistency, whereas a public behavior seemingly did not trigger the same value reflection.  

**Summary of the moderating effects of reflecting on the values indicated by the initial behavior.** The studies reviewed above suggest that when participants can infer that their initial behavior reflects their identification with a goal or value (e.g., because it is done in private, or because they had to pay a price for it), they are more likely to exhibit consistency than when this inference is harder to make (because the initial behavior is public, or because participants’ cognitive resources were depleted). The papers reviewed in this section were less informative when it came to predicting or explaining licensing effects, and reported few cases of licensing.

Painted in broad brushstrokes, these findings are largely consistent with Fishbach’s model of self-regulation. Fishbach predicted highlighting (consistency) when individuals focused on whether their movement towards a goal reflected commitment; the studies presented here report consistency when participants were in a position to infer that their initial behavior reflected deep-seated attitudes (e.g., Gneezy et al. argue that costly behavior serves as a “temporary signal to the self regarding one’s prosocial identity,” p. 179). These findings are also consistent with the CLT framework, in that connecting one’s behavior to one’s values or long-term goals is a high-level construal which would lead to consistency, as observed in these studies.

**Ambiguity of the Initial and Target Behaviors**

The final set of studies we review reveal that the diagnosticity of a behavior (i.e., what

---

5 Greene and Low (2014) investigated whether having an audience for the target behavior (not the initial behavior) influences licensing effects. They found that participants demonstrated licensing for private but not for public unethical target behaviors. Thus, rather than leading to value reflection, the private nature of the target behavior allowed participants to act on their temptations without fear of repercussions.
the behavior reveals about the person performing it) and its opposite, ambiguity, moderate licensing effects. Ambiguous (i.e., less diagnostic) initial behaviors lose their ability to contribute to moral self-regard, thus inhibiting licensing effects, whereas ambiguous target behaviors facilitate licensing effects by releasing constraints on temptation or reducing suspicion.

**Diagnosticity of the initial behavior.** According to attribution theory (Kelley, 1973) and self-perception theory (Bem, 1972), external pressure to perform an initial behavior should diminish its implications for moral self-regard, and thus largely rob it of its ability to yield licensing. Clot et al. (2013) asked some participants to imagine helping to clean a river bank, manipulating whether they would be paid for their work or not. All participants then allocated money between themselves and an environmental charity. Participants in the imagined unpaid prosocial behavior condition were more likely to later keep all the money for themselves relative to a control condition (licensing), whereas there was no difference in selfishness rates between the paid prosocial behavior and the control conditions. Thus, providing a plausible external justification for the initial behavior reduced its licensing power. Similarly, Khan and Dhar (2006, Study 4) found that participants who imagined performing 24 hours of community service were more likely to prefer a hedonic over a utilitarian good (licensing), but only if their community service was voluntary and not when it was an imposed penalty for a traffic violation. When the initial behavior is paid or imposed instead of voluntary, it loses its ability to contribute to moral self-regard and therefore loses its ability to license.

**Ambiguity of the target behavior.** Diagnosticity is deeply rooted in the attributional structure of the situation, and in particular the attributional schemas attached to the moral domain (Reeder & Brewer 1979). In the case of morality (and related domains such as prejudice or the environment), this is reflected in the traditional distinction made in ethics between perfect and
imperfect duties (Kant 2002; Miller & Monin 2015; Wiltermuth et al. 2010). Imperfect duties are desirable feats for a good person -- but not performing them does not impugn your morality. By contrast, perfect duties are black-and-white litmus tests, but they are asymmetrical: someone violating a perfect duty is immoral, whereas someone respecting a perfect duty does not get much moral credit. This suggests that individuals should be particularly concerned about violating perfect duties (e.g., cheating, discriminating), but that the presence of an alternative explanation for such negative behaviors should reduce these concerns, facilitating licensing effects. The two papers reviewed below demonstrate that attributional ambiguity (i.e., multiple possible explanations) for negative target behaviors facilitates licensing effects presumably by allowing individuals to give in to temptation without damaging their moral self-image or by removing the suspicious motive from such behaviors.

Brown et al. (2011) tested whether the ease with which one can rationalize an unethical behavior determines if licensing effects occur. Participants first rated how likely they (positive initial behavior) or an acquaintance (control) would be to behave prosocially in four hypothetical moral dilemmas, and then had an opportunity to cheat on a math test (target behavior) by failing to press the spacebar in time to prevent the correct answers to appear (from von Hippel et al. 2005). When the spacebar needed to be pressed within 1 second, it was easy to rationalize cheating as being too slow (high ambiguity), and participants who had expressed their prosocial intentions cheated more than participants who predicted others’ prosocial behavior (licensing); but when participants had 10 seconds to press the spacebar (low ambiguity), the two conditions no longer differed. The authors argue that licensing is most effective in ambiguous situations.

Monin and colleagues (e.g., Monin & Miller 2001) typically describe licensing effects in terms of how the initial behavior changes the meaning of the target behavior for the actor (a
credentials process), but documenting this construal process from the actor’s perspective is methodologically challenging. A more promising approach is to use observer/judgment paradigms, where participants evaluate an actor’s target behavior after the actor’s initial behavior has been manipulated. The argument is that actors likely use similar processes when thinking of their own behavior, or at least they expect others to rely on similar processes when others judge them. Effron and Monin (2010) used such a third-person approach to tease apart credits and credentials (see sidebar above): In Study 2, participants read about a manager who did not promote Black employees because he did not believe African Americans are suitable for management (blatant racism), or because he claimed that they had performed less well than others (ambiguous). This target behavior was preceded in one condition by another article detailing the manager’s efforts to increase diversity at the company. Relative to a control condition, this positive initial behavior did not reduce observers’ condemnation of the blatant target behavior, but it did reduce condemnation when the target behavior was ambiguous, because it reduced the extent to which participants construed the actor’s behavior as racial discrimination (licensing via credentials). Interestingly, when the initial behavior was in a different domain (i.e., the actor helped combat sexual harassment), it led to less condemnation of both blatant and ambiguous racist violations, but with no change in construal (licensing via credits). Although this observer methodology is a departure from the type of sequential behavior paradigms discussed until now, we posit that the attributional logic used to judge others in such contexts is the same one used by actors when they decide how to act in target situations, and in particular when they project themselves as potential observers anticipating what their target behavior would look like in light of their initial behavior.
Summary of the moderating effect of ambiguity of the behavior. In summary, licensing is inhibited when initial positive behaviors are robbed of their ability to contribute to moral self-regard due to the presence of ulterior motives for the behavior. In contrast, licensing is more likely to occur when target behaviors are ambiguous or easy to rationalize. In addition, research on third-party perceptions of others’ behavior suggests that prior positive behavior can license subsequent ambiguous transgressions when that prior behavior is in the same domain (licensing via credentials) and in a different domain (licensing via credits). However, blatant transgressions can only be licensed by prior positive behavior in a different domain.

DISCUSSION

We reviewed twenty-five studies that proposed to test a moderator of consistency and/or licensing effects. We organized our review around five conceptual themes: construal level, progress versus commitment frame, identification, value reflection, and ambiguity, all of which influenced consistency and/or licensing effects (see Table 2). Our review suggests that individuals are more likely to exhibit consistency when they (a) think abstractly, (b) focus on their commitment, or (c) can draw inferences about their values from their initial behavior. Moreover, individuals are more likely to exhibit licensing (or at least balancing) when they (a) think concretely, (b) focus on progress made, (c) do not identify a priori with the value being tested by the target behavior, (d) face ambiguous target behaviors, or (e) are depleted.

Although it is easy to summarize conditions that produced licensing and consistency effects in these studies, given the diversity of theoretical perspectives utilized, it is more difficult to extract from this body of data a simple model predicting when consistency will occur versus balancing or licensing. From a bird’s eye view, it does seem that an overarching model would likely predict consistency when individuals think abstractly, focus on their commitment, and face
target behaviors that are clearly tests of important values, and likely predict licensing (or at least balancing) when individuals think concretely, focus on progress made, and face ambiguous target behaviors. As soon as such an overarching model is offered, however, it becomes clear that it does not satisfactorily account for all the evidence presented in this review, let alone the numerous non-moderated designs (excluded from our review) in the literature. Moreover, attempting to fit such an overarching model to the existing literature would require making judgment calls about variables that the authors may not have measured, manipulated, or theorized about in their studies. For example, if we wanted to understand the Monin and Miller (2001) initial demonstrations in such a framework, would we need to assume that participants in these studies were thinking concretely, focusing on progress rather than commitment, and facing an ambiguous choice? Though it is entirely possible that this was the case, and that the experimenters stumbled upon the specific appropriate conditions to obtain the effect, it drastically reduces the falsifiability of any emerging model if most studies in the corpus require judgment calls that allow post-hoc assimilation to the model.

Although the current state of the literature prevents us from proposing an overarching model of consistency and licensing effects, there are nevertheless some general conclusions that can be extracted from this review. First, the studies reviewed under the themes of construal level, progress versus commitment frame, identification, and value reflection all converge on the proposition that when individuals connect their initial behavior to their underlying values, they are more likely to behave consistently with their initial behavior. In short, researchers have made decent progress in identifying the conditions that produce consistency in sequential behavior paradigms.
Second, although accumulated demonstrations, a meta-analysis, and a recent multi-lab replication concur to support the notion that licensing effects can be reliably observed, we are arguably much less further along in determining the conditions that are optimal, or even just hospitable, for licensing to emerge. Our review reveals a list of variables that produce licensing, yet there is arguably less theoretical coherence among these variables than those we observed for consistency effects. Although this relative lack of integration among factors that produce licensing might seem reasonable given that researchers have been studying consistency effects far longer than licensing effects, we hope this review provides a starting point for increased theoretical integration moving forward.

Finally, another emerging finding of our review is that many of the proposed moderator studies do not adequately test for licensing, despite claims that they do, because the presence of balancing is not unambiguous evidence of licensing. The vast majority of papers we reviewed purporting to test a moderator in a sequential behavior paradigm report a significant interaction between the proposed moderator and whether the opportunity to perform the initial positive behavior leads to more or less of the target behavior. However, such an interaction can be entirely driven by the cells where consistency is predicted, with no balancing in the other cells. Moreover, even if the interaction is driven in part by the cells where balancing is predicted, in the absence of a baseline condition differing significantly from the positive initial behavior condition (licensing), the observed significant balancing can result entirely from the effect of the negative initial behavior condition (compensation). Thus observing a significant interaction is still at least two steps removed from being able to claim anything about licensing. In fact, 18 studies (of the 25 we reviewed) predicted that a condition should elicit consistency; of those, 83% (15 of 18) successfully demonstrated consistency (see Supplemental Table). All 25 studies
we reviewed predicted that a condition should elicit balancing, and 84% (21 of 25) successfully demonstrated balancing. However, 7 studies (28%) utilized a donut design, leaving only 18 studies that included a design that enabled testing for licensing; of those, 67% (12 of 18) provided evidence for licensing.

Furthermore, evidence for the type of full crossover interaction that we called for earlier as the touchstone of a successful moderator remains elusive. Eighteen of the 25 studies reviewed set out to demonstrate consistency and balancing in the same study (the remaining 7 only purported to turn licensing on and off -- an ordinal interaction); yet even if we include “marginal” simple effects, only 4 of these 18 studies (22%) actually demonstrated both consistency and balancing, while only one (5.5%) demonstrated both effects at the conventional \( p < .05 \) level -- and it is debatable whether that study (Gneezy et al. 2012) qualifies as a Sequential Behavior Paradigm because the initial “behavior” was a tax imposed by the experimenter (see Footnote 4). Thus, despite what a casual read of this literature might suggest, identifying a moderator that successfully flips significant consistency into significant balancing in the same Sequential Behavior Paradigm remains an unmet challenge, and still the Holy Grail of this literature.

**Conclusion**

The last five years have seen the appearance of numerous empirical attempts to elucidate why past behavior sometimes leads to licensing, and sometimes to consistency. This review presented many of these findings side by side to facilitate comparison, and utilized five overarching themes as a way of integrating the various proposed moderators under broader umbrellas. As a result of our review, it should be clear that future researchers interested in disentangling licensing from compensation or consistency should consider whether individuals
have an opportunity to connect their behavior to their underlying values, the extent to which individuals identify with the value a priori, and the ambiguity of the initial and target behavior. Our review presents an initial attempt to organize and integrate the various proposed solutions to the conundrum of when initial moral behavior licenses and when it constrains subsequent behavior; if nothing else, we hope to have inspired researchers to continue chipping away at an integrative answer to this fascinating puzzle.
Summary Points

1. The past five years have seen a dramatic increase in the number of attempts to solve the puzzle of when positive initial behavior leads to less positive behavior (licensing) versus more positive behavior (consistency).

2. Identifying moderators of consistency and licensing effects has been hindered by the profusion of theoretical approaches (with little attempt at integration), and excessive reliance on “donut designs” (which lack a baseline condition).

3. Licensing is most likely to occur in situations where multiple goals conflict, either actually (temptation) or potentially (suspicion). We distinguish a moral credits version of licensing, akin to a metaphorical bank account, and a moral credentials version, which reduces suspicion by interpreting later behavior in light of the former behavior.

4. Licensing is often conflated with balancing, which can result solely from compensation processes. Compensation and licensing are both elements of balancing, but can be produced via different processes; thus it is important to distinguish them theoretically and empirically by avoiding donut designs.

5. Consistency (versus licensing) is more likely to be observed when individuals think abstractly (instead of concretely), focus on commitment (instead of progress), and connect their behavior to their underlying values.

6. Individuals who strongly identify with a cause are less likely to exhibit licensing than individuals who do not identify with the cause (particularly when the target behavior is unambiguous).

7. Researchers interested in disentangling licensing from consistency should consider whether individuals have an opportunity to reflect on how their behavior relates to their
underlying values, the extent to which individuals identify with the value a priori, and the ambiguity of the target behavior.

**Future Issues**

1. Future studies should include a baseline condition and sufficient power to distinguish licensing effects from compensation effects in balancing paradigms.

2. Future studies should distinguish moral credits and moral credentials (for a start see Merritt et al., 2010), and identify the conditions under which each kind of licensing prevails.

3. Future research should explore whether the ambiguity of the target behavior interacts with identification to produce licensing via different pathways. In particular, high identifiers may need credentials to engage in ambiguous, negative target behaviors, but should consistently refrain from unambiguous, negative target behaviors. In contrast, low identifiers may use credits to engage in unambiguous, negative target behaviors, whereas they may use ambiguous situations as psychological cover to act on illicit motives irrespective of their prior behavior.

4. Future research should endeavor to more clearly delineate the differential effect of commitment certainty and identification with the cause, to resolve apparent contradictions.

5. Future research should continue to explore how initial behavior relates to identity, which in turn influences licensing and consistency. Effron and Conway (in press) suggested that when initial behavior highlights a commitment to a positive identity (e.g., egalitarianism), people are more likely to behave consistently with that identity; however, when initial behavior merely allows individuals to rule out a discrediting identity (such as being a
racist) rather than highlighting their commitment to a positive identity (e.g., egalitarianism) that moral licensing is more likely to be exhibited. Future research should explore this possibility.

6. Large-scale replication efforts of licensing effects such as the one conducted by Ebersole et al. (2015) are encouraged to increase our confidence in effects often tested with small samples.
DISCLOSURE STATEMENT

The authors are not aware of any affiliations, memberships, funding, or financial holdings that might be perceived as affecting the objectivity of this review.

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LITERATURE CITED


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Sidebar

**Moral Credits versus Moral Credentials**

Some researchers (Merritt et al. 2010; Miller & Effron 2010) contrast two different forms of moral licensing: In a moral “credits” model, individuals accumulate credits in a metaphorical moral bank account, and later use them to buy out of positive behavior or offset negative behavior, retaining an overall positive balance on their moral ledger despite clear withdrawals (Nisan & Horenczyk 1990; Jordan et al. 2011). By contrast, in a moral “credentials” model of licensing, the initial behavior provides a lens through which subsequent behavior is interpreted. So performing an initial moral act does not mean that one has earned the right to perform an immoral act with impunity, but instead that subsequent behavior is less likely to be interpreted as immoral (Monin & Miller 2001). As this description highlights, a credentials process is more likely at work when the motivations for the target behavior are ambiguous (e.g., racism vs. pragmatism), and the initial behavior renders the suspicious motivation (here racism) less plausible. Given that most studies reviewed here were not designed to test this distinction (for an exception, see Effron & Monin 2010), we omit it from our empirical review.

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6 Note to production team: Please place this sidebar near the sentence that reads: Although licensing is construed by some as merely the inverse of compensation . . . it can also be produced via qualitatively different psychological processes (moral credits vs. moral credentials; see sidebar . . . ) - currently the bottom of page 7.
Glossary and Acronyms

**Balancing:** when an initial behavior produces the opposite in the target behavior (positive behavior decreases positivity; negative behavior increases positivity)

**CLT:** Construal Level Theory

**Compensation:** when a negative initial behavior leads to more positive target behavior than a neutral baseline condition (aka cleansing)

**Donut Design:** a two-cell or two-by-two design that omits a baseline condition (typically compares the effect of positive versus negative initial behavior)

**Licensing:** when a positive initial behavior yields less positive target behavior than a neutral baseline condition

**Moral Credentials Model:** initial positive behavior provides a lens through which subsequent ambiguous behavior is interpreted to allow licensing

**Moral Credits Model:** positive initial behavior provides credits (as in a moral bank account) that can license subsequent behavior

**Negative Consistency:** when a negative initial behavior leads to more negative target behavior than a baseline condition (a “vicious cycle”)

**Positive Consistency:** when a positive initial behavior leads to more positive target behavior than a baseline condition (a “virtuous cycle”)

Table 1.

*Hypothetical outcomes in the “donut” version of the sequential behavior paradigm.*

<table>
<thead>
<tr>
<th>Initial behavior</th>
<th>Outcome 1</th>
<th>Outcome 2</th>
<th>Outcome 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive</td>
<td>5</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td><em>Baseline</em></td>
<td>?</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Negative</td>
<td>3</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>
Table 2. *Factors leading to consistency or balancing in sequential choice.*

<table>
<thead>
<tr>
<th>Proposed Moderator</th>
<th>Consistency</th>
<th>Balancing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Construal Level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conway &amp; Peetz 2012</td>
<td>Abstract Construal</td>
<td>Concrete Construal</td>
</tr>
<tr>
<td></td>
<td>Distant temporal</td>
<td>Recent temporal</td>
</tr>
<tr>
<td></td>
<td>Concrete actions</td>
<td></td>
</tr>
<tr>
<td>Cornelissen et al. 2013</td>
<td>Rules</td>
<td>Outcomes</td>
</tr>
<tr>
<td>Weibel et al. 2014</td>
<td>Intentions</td>
<td>Actions</td>
</tr>
<tr>
<td><strong>Commitment versus Progress</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Susewind &amp; Hoelzl 2014</td>
<td>Commitment Frame</td>
<td>Progress Frame</td>
</tr>
<tr>
<td></td>
<td>Commitment</td>
<td>Progress</td>
</tr>
<tr>
<td><strong>Identification with Cause</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meijers 2014</td>
<td>High Identification</td>
<td>Low Identification</td>
</tr>
<tr>
<td></td>
<td>Low pro-environment identity</td>
<td></td>
</tr>
<tr>
<td>Clot et al. 2014</td>
<td>[Low pro-environment identity + voluntary initial behavior]</td>
<td></td>
</tr>
<tr>
<td>Effron et al. 2009</td>
<td>High egalitarianism</td>
<td>Low egalitarianism</td>
</tr>
</tbody>
</table>

(continued)
### Proposed Moderator

<table>
<thead>
<tr>
<th>Value Reflection</th>
<th>Consistency</th>
<th>Balancing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connect Initial Behavior to Values</td>
<td></td>
<td></td>
</tr>
<tr>
<td>De Not Connect Initial Behavior to Values</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Joosten et al. 2014</td>
<td>Non-depleted</td>
<td>Depleted</td>
</tr>
<tr>
<td>Gneezy et al. 2012</td>
<td>Costly</td>
<td>Costless</td>
</tr>
<tr>
<td>Kristoferson et al. 2014</td>
<td>Private initial behavior</td>
<td></td>
</tr>
</tbody>
</table>

### Ambiguity

#### Initial Behavior

| Clot et al. 2013 | Unpaid prosocial behavior |
| Khan Dhar 2006 | Voluntary prosocial behavior |

#### Target Behavior

| Brown et al. 2011 | High ambiguity / Easy to rationalize cheating |
| Effron & Monin 2010 | [Ambiguous + same or different domain] or [Blatant + different domain] |
Figure 1.

Graphical depiction of hypothetical outcomes of a sequential behavior paradigm. In the absence of a baseline in the “donut” design (depicted on the right), authors cannot distinguish the contribution of licensing and compensation to any observed balancing effect.
<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Year</th>
<th>Study</th>
<th>Proposed Moderator</th>
<th>Predicted Consistency</th>
<th>Predicted Balancing</th>
<th>Predicted No Effect</th>
<th>Initial Behavior</th>
<th>Target Behavior</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brown et al.</td>
<td>2011</td>
<td>1</td>
<td>Ease of Rationalizing</td>
<td>Target Behavior</td>
<td>Rationalizing</td>
<td>Not Rationalizing</td>
<td>Predict (own, other) prosocial behavior in moral dilemmas</td>
<td>Cheating</td>
<td>B Y N N Y Y</td>
</tr>
<tr>
<td>Cet et al.</td>
<td>2013</td>
<td>1</td>
<td>Attribution (Money Paid)</td>
<td>for Initial Positive Behavior</td>
<td>Imagine Unpaid</td>
<td>Imagine Paid</td>
<td>Imagined performing good deed, baseline</td>
<td>Decision to keep all of money for self rather than give some to charity (binary choice)</td>
<td>B x N N Y Y</td>
</tr>
<tr>
<td>Cet et al.</td>
<td>2014</td>
<td>1</td>
<td>Pre-environmental Identity</td>
<td>(low, high) x Voluntary x Mandatory</td>
<td>Low Identification = Mandatory</td>
<td>Low Identification = Voluntary</td>
<td>and [High Identification = Mandatory]</td>
<td>Voluntary mandatory participation in pro-environmental program, baseline</td>
<td>Willingness to donate to environmental organization</td>
</tr>
<tr>
<td>Conway &amp; Peete</td>
<td>2012</td>
<td>1</td>
<td>Conceptual Abstraction</td>
<td>Distal/Abstract</td>
<td>Recent/Concrete</td>
<td></td>
<td>Recall moral/immoral</td>
<td>Willingness to volunteer</td>
<td>O Y Y a a a</td>
</tr>
<tr>
<td>Conway &amp; Peete</td>
<td>2012</td>
<td>2</td>
<td>Conceptual Abstraction</td>
<td>Distal/Abstract</td>
<td>Recent/Concrete</td>
<td></td>
<td>Recall moral/immoral for self or other</td>
<td>Willingness to volunteer</td>
<td>O Y N a a a</td>
</tr>
<tr>
<td>Conway &amp; Peete</td>
<td>2013</td>
<td>3</td>
<td>Conceptual Abstraction</td>
<td>Traits/Abstract</td>
<td>Actions/Concrete</td>
<td></td>
<td>Imagine moral/immoral</td>
<td>Donate to charity</td>
<td>O Y N a a a</td>
</tr>
<tr>
<td>Cornelissen et al.</td>
<td>2013</td>
<td>1</td>
<td>Ethical Mindset</td>
<td>Rules</td>
<td>Outcomes</td>
<td></td>
<td>Recall moral/immoral</td>
<td>Dictator allocation</td>
<td>O Y Y a a a</td>
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<tr>
<td>Cornelissen et al.</td>
<td>2013</td>
<td>2</td>
<td>Ethical Mindset</td>
<td>Rules</td>
<td>Outcomes</td>
<td></td>
<td>Recall moral/immoral, baseline</td>
<td>Dictator allocation</td>
<td>O Y Y N N Y</td>
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<tr>
<td>Cornelissen et al.</td>
<td>2013</td>
<td>3</td>
<td>Ethical Mindset</td>
<td>Rules</td>
<td>Outcomes</td>
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<td>Cheating (matrix task)</td>
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<tr>
<td>Effron et al.</td>
<td>2010</td>
<td>1</td>
<td>Ethical Identity</td>
<td>High</td>
<td>Low</td>
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<td>Expressing vote for Obama, baseline</td>
<td>Cutting funds for African-American neighborhood</td>
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<td>Gneezy et al.</td>
<td>2012</td>
<td>1</td>
<td>Cost of Initial Behavior</td>
<td>Costly</td>
<td>Costless</td>
<td>Costless</td>
<td>Money donated to charity by experimenter on P's behalf, baseline</td>
<td>Lie to a peer to get more money</td>
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<td>Gneezy et al.</td>
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<td>Pilot 1</td>
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<td>Greene &amp; Low</td>
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<td>Audience for Target Behavior</td>
<td>Private</td>
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<td>Recall moral/immoral, baseline</td>
<td>Unethical behavior intentions in vignettes</td>
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<tr>
<td>Issen et al.</td>
<td>2014</td>
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<td>Resource Depletion</td>
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<td>Khan &amp; Dhar</td>
<td>2006</td>
<td>4</td>
<td>Ambiguity of Initial Behavior</td>
<td>Unambiguous (Voluntary)</td>
<td>Ambiguous (Mandatory)</td>
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<td>Imagine volunteering, baseline</td>
<td>Hedonic vs. utilitarian choice</td>
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<td>Kristoferson et al.</td>
<td>2014</td>
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<td>Agree to wear/bake token pin, baseline</td>
<td>Money donated</td>
<td>B a Y Y N N N</td>
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<td>Kristoferson et al.</td>
<td>2014</td>
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<td>Audience for Initial Behavior</td>
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<td>Public</td>
<td></td>
<td>Sign petition, baseline</td>
<td>Time volunteered</td>
<td>B y y y N N</td>
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<tr>
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<td>2014</td>
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<td>Sign petition, baseline</td>
<td>Willingness to help</td>
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<td>2014</td>
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<td>Identity Relevance</td>
<td>Low Identification</td>
<td>High Identification</td>
<td></td>
<td>Imagine green vs conventional purchase</td>
<td>Pro-environmental attitudes</td>
<td>B Y a o a Y Y</td>
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<td>Low Identification</td>
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<td>Shop green vs conventional website</td>
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<td>2014</td>
<td>1</td>
<td>Framing of Initial Behavior</td>
<td>Commitment Focus</td>
<td>Progress Focus</td>
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<td>Shop green vs conventional website</td>
<td>Likelihood of prosocial behavior</td>
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<td>Susewind &amp; Hostetl</td>
<td>2014</td>
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<td>Progress Focus</td>
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<td>Brainstorm how to help disabled person or self</td>
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<td>Welset al.</td>
<td>2014</td>
<td>2</td>
<td>Stage-of-Completeness</td>
<td>Initiated</td>
<td>Completed</td>
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<td>Altruistic vs selfish action or intention</td>
<td>Female apple or candy bar</td>
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</table>

Notes: * Effron and Morin (2010) is a 3rd person/observer study, so the licensing takes a slightly different format. The issue is when a target's prior behavior affects others' judgment of the target's subsequent behavior. If prior behavior lets the target off the hook, we treat this as a licensing effect.