

TEACHER-READY RESEARCH REVIEW

Managing for Academic Integrity in Higher Education: Insights From Behavioral Ethics

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Despite the plethora of research on factors associated with academic dishonesty and ways of averting it, such dishonesty remains a significant concern. There is a need to identify overarching frameworks through which academic dishonesty might be understood, which might also suggest novel yet research-supported practical insights aimed at prevention. Hence, this article draws upon the burgeoning field of behavioral ethics to highlight a dual processing framework on academic dishonesty and to provide additional and sometimes counterintuitive practical insights into preventing this predicament. Six themes from within behavioral ethics are elaborated. These indicate the roles of reflective, conscious deliberation in academic (dis)honesty, as well as reflexive, nonconscious judgment; the roles of rationality and emotionality; and the ways in which conscious and nonconscious situational cues can cause individual moral identity or moral standards to become more or less salient to, and therefore influential in, decision-making. Practical insights and directions for future research are provided.

Keywords: academic dishonesty, academic integrity, behavioral ethics, dual processing, emotion

Academic dishonesty continues to be a significant concern in institutions of higher education. In a survey of over 80,000 students from 83 different campuses in the United States and Canada, approximately one in five students reported having engaged in a serious form of exam cheating in the last year (i.e., copying from another student, using crib notes, or helping someone else to cheat on a test or exam), and a third of students reporting having acquired advance information about test content from another student who had already taken the test. Even higher levels of dishonesty were reported on written assignments, wherein over 40% of undergraduates indicated having engaged in collaboration on individual assignments, and between 35% and 40% reported having paraphrased or copied up to a few sentences from written or Internet sources without appropriate citation (McCabe, 2005).

Such dishonesty has potential for a range of unfair advantages to some students at the expense of others (MacGregor & Stuebs, 2012) and is associated with a number of potential predicaments for institutions themselves. These include operational costs associated with the administration of relevant policies (Boehm, Justice, & Weeks, 2009), as well as reputational risks (Sutherland-Smith, 2010, 2014) that could negatively impact achievement of strategic goals, such as those associated with recruitment, retention, or fundraising. Furthermore, the association between academic and subsequent work-related dishonesty (LaDuke, 2013) raises serious questions about the extent to which institutions of higher education are fulfilling certain mandates, such as the preparation of students for principled engagement with future work and citizenship responsibilities (Klein, Levenburg, McKendall, & Mothersell, 2007).

However, despite the plethora of research on factors associated with academic dishonesty and ways of averting it (for reviews, see Broeckelman-Post, 2008; Christensen Hughes & McCabe, 2006; Crittenden, Hanna, & Peterson, 2009; McCabe, Treviño, & Butterfield,

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2001, 2002; Shephard, Trotman, Fumari, & Löfström, 2015), such dishonesty remains a significant concern. Moreover, there is a need to identify overarching frameworks through which academic dishonesty might be understood, which might also suggest novel yet research-supported practical insights for prevention (Gallant & Drinan, 2006; Murdock & Anderman, 2006). Hence, the purpose of this article is to draw upon the burgeoning field of behavioral ethics (DeCremer & Tenbrunsel, 2012) to highlight a dual-processing framework for understanding academic dishonesty, and to provide additional and sometimes counterintuitive practical insights into prevention of this predicament. Six themes from within behavioral ethics are elaborated. These indicate the roles of reflective, conscious deliberation, as well as reflexive, nonconscious judgment in (dis)honest actions; the roles of both rationality and emotionality; and the ways in which conscious and nonconscious situational cues can cause individual moral identity or moral standards to become more or less salient to, and therefore influential in, decision-making (Banaji, Bazerman, & Chugh, 2003; Haidt, 2001; Monin, Pizarro, & Beer, 2007; Reynolds, 2006; Reynolds, Leavitt, & DeCelles, 2010; Welsh & Ordóñez, 2014a, 2014b). Consider first the notion of academic dishonesty as an ethical issue.

Academic Dishonesty as an Ethical Issue

Academic dishonesty can be defined as “fraudulent behavior involving some form of deception whereby one’s work or the work of others is misrepresented” (Prescott, 1989, p. 285). Examples include plagiarism, fabrication, the shared use of work for individual assignments, the purchase of work, or cheating on exams. Notwithstanding scholarly critique of the social construction of plagiarism in ethical terms (Valentine, 2006), such behaviors are often seen as violations of important moral values associated with integrity (Bloodgood, Turnley, & Mudrack, 2008), and therefore often framed as ethical concerns (Kaufman, 2008; Prochaska, 2012). Indeed, the International Center for Academic Integrity explicitly identified the centrality of ethics to academic integrity when it defined this construct as a commitment that individuals have to six essential moral values that can be used to “inform and improve eth-

ical decision-making capacities and behavior” (Fishman, 2013, p. 15).

A Dual Processing Perspective Within Behavioral Ethics

Unlike philosophical ethics that focus on the role of conscious deliberation in *prescribing* normative standards for the actions in which individuals *ought* to engage in response to a particular ethical issue, the field of behavioral ethics focuses on *describing* what individuals *actually do* in response to ethical issues, and more specifically, with identifying reliable and predictable patterns of behavior and the circumstances under which these would be expected to occur (DeCremer & Tenbrunsel, 2012). Moreover, within behavioral ethics, it is recognized that conventional perspectives that have privileged reflective, rational, and conscious reasoning are inadequate to fully capture the processes through which ethical decision-making occurs. Hence, this field has shifted toward dual processing frameworks that also include a role for reflexive and sometimes emotionally laden judgments that occur below the level of conscious awareness (Banaji et al., 2003; Haidt, 2001; Monin et al., 2007; Reynolds, 2006; Welsh & Ordóñez, 2014b). Moreover, dual processing models have demonstrated that situational cues can interact with implicit assumptions about the morality of certain activities to influence moral behavior (Reynolds et al., 2010), and also, that exposure to ethics-related cues that occur below the level of conscious awareness can activate moral standards, thereby influencing ethical behavior even in morally ambiguous contexts (Welsh & Ordóñez, 2014a). Consider, therefore, specific themes on dishonesty that emerge from behavioral ethics research, and the implications of these for preventing dishonesty. This information is also summarized in Table 1.

Specific Themes on (Dis)Honesty From Behavioral Ethics Research

I. Individuals Are Poor at Predicting How (Dis)Honest They Will Be and How They Will Feel About Their Own (Dis)Honesty

Research. Tenbrunsel and colleagues (2010) argued that one reason individuals act

Table 1

Potential Teaching Implications of Research on Dishonesty From Within Behavioral Ethics

1. Help students to understand and anticipate the difference between what they *predict* that they will do and feel when cheating opportunities arise, and what they are actually likely to do and feel when those opportunities arise. Help students to develop in advance a concrete plan for managing effectively when opportunities for dishonesty do arise.
2. Provide training to clarify the meaning, nature and types of academic dishonesty.
3. Use cues that make personal moral standards more salient prior to completion of evaluative components. For example, ask students to sign an honesty pledge before a test, rather than after.
4. Foster prominent and influential ethical values within courses and classes, including peer modeling and coaching.
5. When integrity-related systems and sanctions are present, implement these in a consistent way.
6. Avoid a focus on “losing marks” for late submissions or other inadequacies. Focus instead of “gaining marks” for timely and good contributions.
7. Actively cultivate time management and planning skills within each course. Consider the development and use of peer-led study or tutorial groups to model, support or encourage effective time management and planning. Break large assignments down into smaller components and coach students to do the same.
8. Educate students (and parents) about the importance of telling someone early and seeking support if students begin to feel overwhelmed.
9. Attend to signs of anxiety and connect students with support services in a timely way. At the outset of courses, discuss professor and student roles and responsibilities.
10. Encourage and support “self-compassion” in students.
11. Check closely for dishonesty in assignments due at the end of term, rather than assuming that earlier patterns of integrity will be consistent over time.
12. Open blinds and doors and make use of available lighting. “Air out” and tidy exam rooms prior to student arrival, and offer use of hand sanitizers and tissues during exams (e.g., cold and flu season).
13. Decrease perceptions about prevalence of dishonesty by decreasing opportunities for dishonesty. Consider the use of social norming campaigns to correct false perceptions students might hold about the prevalence and severity of dishonesty within a given population and the comfort level other students have with dishonesty.
14. Ensure fair expectations and evaluative components. Act to prevent potential inequity or discrimination, including implicit forms.
15. Engage in ongoing professional and course development to foster perceptions of competence and engagement.
16. As a teacher, be a good steward of your own well-being and also practice “self-compassion.”
17. Coach and support students to have a healthy balance between school, rest and recreation. Also attend to the number, size and weighting of evaluative components within courses.
18. Support accommodations for students with circadian sleep-wake disorders that can be associated with depletion at specific times of day.
19. Give consideration to ways of balancing the potential for positive and negative consequences of goal setting; to establishing challenging rather than depleting goals; and to potential drawbacks to the ongoing use of high goals.
20. Foster a focus on mastery rather than performance.

less ethically than they themselves predict is that people tend to be excessively optimistic and “self-enhancing” when anticipating their own behavior, and that this is particularly true with regard to socially desirable behaviors such as ethics. They argued that although the more rational “should self” tends to dominate when making predictions, the more impulsive and emotional “want self” tends to dominate when actually in particular situations. In addition to being poor at predicting actual dishonesty, individuals have also been found to inaccurately predict how they will feel about their own cheating behavior, typically anticipating either negative feelings or ambivalence. However, individuals who engaged in victimless cheating experienced greater positive feelings (and no

greater negative feelings) than those who did not cheat (Ruedy, Moore, Gino, & Schweitzer, 2013). Moreover, results suggested that “the cheater’s high reflects the thrill of having gotten away with cheating” (p. 543), and that this might be one reason why individuals still engage in cheating with potential to provide only limited personal benefit. Indeed, anticipated elation rather than anticipated regret has been associated with greater willingness to cheat academically, and this likely occurs because individuals anticipate both higher grades and not getting caught (Sierra & Hyman, 2006).

Practical implications. In underestimating their own likelihood of academically dishonest behaviors and inaccurately predicting the feelings they would experience, students might also

undervalue the benefit that education on academic integrity from a behavioral ethics perspective could provide. It is therefore important for faculty to provide mandatory and leading edge education in this area. This should include teaching students from the outset of term to anticipate the needs, emotions, and behaviors that might well emerge from the “want” self when future opportunities for self-beneficial actions occur (Tenbrunsel, Diekmann, Wasde-Benzoni, & Bazerman, 2010). Advance consideration of the more impulsive and emotional tendencies that can emerge from the “want self” would enable development of a plan for effectively managing these. In this regard, consideration of situational factors normally overlooked in the prediction stage would be important. By anticipating and preparing for such events, individuals can develop self-regulation strategies that can be applied at future events.

II. Most Individuals Engage in Some Degree of Dishonest Behavior, Yet Are Motivated to Maintain Positive Concepts of Self

Research. Mazar and colleagues (2008) identified that many individuals demonstrate dishonest actions for which they receive personal benefit, but that they also limit the level of their own dishonesty such that it will allow them to maintain a positive self-concept. Two factors facilitate this process. The first of these is the extent to which there is malleability in the way in which individuals can characterize an unethical behavior, which provides flexibility for individuals to rationalize their actions. Hence, when social consensus about the ethicality of an action is lower, as has been found to be true with academic dishonesty (Reynolds & Ceranic, 2007), there is a higher degree of malleability in whether it will be categorized as an ethical issue, and more freedom to rationalize such dishonesty. This enabling factor of malleability might also help explain why cheating increases when others benefit from it (Gino, Ayal, & Ariely, 2013).

A second factor that influences whether individuals will be able to maintain a positive self-concept while engaging in dishonest behavior is the extent to which ethicality is salient in a particular context. Indeed, certain cues can cause individual ethical identity or standards to

be more salient, thereby increasing their tendency to characterize ambiguous situations as ethical ones. For example, Mazar and colleagues (2008) found that participants who were asked to recall certain religious injunctions prior to self-beneficial cheating opportunities cheated significantly less than those who were asked to recall a neutral list of books recently read. Similarly, Shu and colleagues (2012) found less cheating when ethical considerations were made more salient in advance of cheating opportunities by asking participants to sign an honesty pledge at the top of a form before an activity started, rather than at the bottom of the form after an activity occurred. Bryan, Adams, and Monin (2013) found that dishonesty in self-reported performance was lower for students who were instructed “Please don’t be a cheater” compared with students who were instructed “Please don’t cheat,” suggesting that strengthening the link between dishonest behavior and an unfavorable personal moral identity can inhibit cheating. In addition, even when exposure to ethics-related cues occurs below the level of conscious awareness, this can activate personal moral standards and behavior. Specifically, whereas previous research had demonstrated that exposure to even very subtle contextual cues could influence ethicality, it was unclear from such research whether these subtle cues activated automatic processing that occurred below the level of conscious awareness, or whether these cues, though subtle in nature, were still explicit prompts for intentional, conscious reasoning. However, using very sophisticated and carefully controlled experimental methods, Welsh and Ordóñez (2014a) demonstrated that ethics-related cues (e.g., unscrambling five words into a four word sentence that contained an ethics-related word) that occurred below the level of conscious awareness decreased dishonesty, even when participants were unmonitored and given very challenging performance goals that had earlier been found to elicit unethical behavior.

Practical implications. Research has identified the importance of providing training to clarify the meaning and types of academic dishonesty (Gullifer & Tyson, 2010; O’Neill & Pfeiffer, 2012). Research within behavioral ethics suggests that clarity will decrease the malleability and hence rationalization of dishonest actions. In addition, cues such as asking stu-

dents to recall or sign integrity pledges at the beginning of exams are likely to make individual moral standards more salient when opportunities for dishonesty exist. These would, therefore, be expected to decrease dishonesty among those who hold moral standards that are inconsistent with dishonesty (Welsh & Ordóñez, 2014a). However, although associating dishonesty with an unfavorable personal identity by using instructions such as “please don’t be a cheater” might seem sensible, further research is warranted. In particular, asking students to “please don’t be a cheater” could contribute to the development of a negative personal identity (i.e., “cheater”) among those who are dishonest, and over time, this negative identity could lead to increased rather than decreased dishonesty (Bryan et al., 2013).

III. Even When Individuals Are Consciously Committed to Academic Integrity, They Might Nonconsciously Demonstrate Behaviors Inconsistent With Their Stated Commitment

Research. “Bounded ethicality” refers to situations in which individuals make unethical decisions that might well be inconsistent with their own ethical standards, but do so in the absence of conscious awareness that this is occurring (Chugh, Bazerman, & Banaji, 2005). In relation to academic dishonesty, this can occur through common egocentric biases that can lead individuals to overestimate their contributions to group projects by overclaiming the proportion of total work they completed (Caruso, Epley, & Bazerman, 2006). In addition, if individuals are experiencing conditions of high cognitive burden on their working memory when ideas first appear, plagiarism that occurs below the level of conscious awareness is more likely, as high cognitive burden disrupts ability to focus on the source of ideas (Marsh, Landau, & Hicks, 1997).

An additional way in which dishonesty can occur in the absence of conscious awareness involves the way in which a particular problem is “framed” or characterized by individuals, thereby determining the type of information to which they attend (Kern & Chugh, 2009; Tenbrunsel & Messick, 2004). In particular, if students do not yet fully understand the range of behaviors that comprise the various forms of

academic dishonesty, and also have not yet acquired clear ethical exemplars for responding to opportunities for academic dishonesty, then the students would be much less likely to “frame” or categorize opportunities for dishonesty as ones involving ethical dimensions, and more likely frame such situations as some other (non-ethical) type of decision (Reynolds, 2006). Moreover, the common use of penalties for academic dishonesty might also contribute to student use of a nonethical frame or decision-making mindset in relation to dishonesty, which can exacerbate, rather than diminish the problem.

Specifically, in a study evaluating the influence of sanctioning systems or penalties on cooperation, Tenbrunsel and Messick (1999) found that in the *absence* of sanctioning systems, most participants characterized situations as ethical in nature and therefore used an “ethical” frame or mindset in which they considered the “right” thing to do. However, in the *presence* of sanctioning systems, most characterized the decision as a business one, and therefore used a “calculative” frame or mindset, in which they made decisions by assessing potential probabilities and costs of being caught. As a real life, everyday example, Tenbrunsel and colleagues (2010) highlighted a study by Gneezy and Rustichini (2000) who found that penalties in the form of monetary fines actually increased rather than decreased the significant problem of parents arriving late to collect their children from daycare. This increase in lateness when picking children up from daycare was seen in terms of a shift in the parents’ decision-making “frame” or mindset such that in the *absence* of sanctioning systems (i.e., when no monetary fines for lateness were present) the parents used an “ethical” frame in which they considered the “right thing” to do; but in the *presence* of sanctioning systems (i.e., when the monetary fines for lateness were introduced) the parents used a “calculative” frame in which they engaged in a cost benefit analysis of whether the opportunity for lateness was worth the monetary fine.

In a similar way, the common use of sanctions or penalties for academic dishonesty might well induce calculative (rather than ethical) decision-making mindsets among students, in which they focus on the probability and costs of getting caught (rather than on ethical questions of whether dishonesty is right or wrong).

This is particularly concerning given that, when used in the presence of *weak* sanctioning systems (in which there is a small probability that unethical actions will be discovered and a low cost if they are discovered), calculative frames or decision-making mindsets are likely to be associated with decreased ethical behavior (Tenbrunsel & Messick, 1999). Specifically, when it comes to academic dishonesty in higher education, sanctioning systems are often weak. Many students perceive that faculty fail to adequately monitor and take effective action against academic dishonesty (McCabe, Butterfield, & Treviño, 2006), and faculty themselves often ignore apparent cases of dishonesty out of concerns that the evidence they have gathered will not meet required standards of proof (McCabe, 2005). Hence, such weak sanctioning systems might well undermine the original intention of the sanctions to decrease academic dishonesty, and result in the opposite to intended effects.

In addition, individuals are more likely to be dishonest when attempting to avert or recapture losses rather than to gain benefit, indicating potential predicaments with a loss versus gain frame (Kern & Chugh, 2009). However, though often nonconscious, such dishonesty might become apparent to individuals at certain thresholds. For example, an important finding noted in review by Rick et al. (2008) is that at least in terms of serious (i.e., criminal) financial actions, dishonesty is likely when individuals have made life choices that cause them to be in substantial arrears; simultaneously perceive that they cannot share this information with important others; and identify a remedy that appears as though it can be implemented in secret (i.e., Cressey, 1950). Rick and colleagues identified that similar processes are possible when individuals perceive themselves to be academic arrears, particularly in competitive contexts.

Practical implications. Research related to the use of ethical rather than calculative frames or decision-making mindsets might explain findings of decreased academic dishonesty in contexts in which ethical values associated with academic integrity are very prominent and influential, and actively cultivated among students, faculty and staff (McCabe & Treviño, 1993; McCabe et al., 2002). McCabe and colleagues (2002, 2006) argued that involving students in the development, implementation and

enforcement of honor codes (or modified versions thereof) inculcates integrity and responsibility as central aspects of student roles. The cultivation of esteemed values and processes within and across peer groups might induce ethical rather than calculative decision-making mindsets, thereby priming consideration of moral standards, and offering less malleability for the rationalization of dishonest actions. Hence, efforts to foster prominent and influential ethical values with particular attention to the role that peers can serve in modeling and coaching ethical action is important. As indicated by McCabe and colleagues (2001), this can be pursued at the institutional level, but also, the level of individual classes that faculty might teach. When sanctioning systems are used, the research by Tenbrunsel and Messick (1999) identifies the importance of strong and consistent sanctions. This might be supported by the institutional use of honor codes, which are thought to decrease faculty resistance both to academic integrity systems and to addressing dishonesty. Specifically, when honor codes are used, these can decrease faculty perceptions that they are solely responsible for academic integrity functions and instead promote shared responsibilities with students for monitoring and evaluating potential cases of dishonesty (McCabe et al., 2002, 2006).

In terms of findings of increased dishonesty when a “loss” versus “gain” frame is used, students and faculty often discuss “losing marks” for late submissions or other inadequacies, rather than beginning with zero and “gaining marks” for timely and good contributions. This raises questions about whether using the latter framing would decrease dishonesty.

In addition, parallels between academic dishonesty and serious forms of financial dishonesty (Rick et al., 2008; i.e., poor choices leading to academic arrears; perception that this situation cannot be shared with important others; and, perceptions that a private remedy involving dishonesty is available) suggest the importance of actively cultivating effective time management and planning skills with students from the outset of specific courses, including attention to ways of overcoming common human tendencies such as the planning fallacy (Kahneman & Tversky, 1979) in which individuals underestimate the amount of time that will be needed to finish a project even though other similar proj-

ects have taken much longer than expected. The development of and use of peer-supported or peer-led tutorial or study groups could model, support, teach or encourage effective time management and planning. In addition, within courses, it would be helpful if faculty could break large assignments down into smaller steps, or alternately, coach students to take this approach themselves. Finally, if it is accurate that students might perceive that they cannot share information about academic arrears with important others, this might suggest important roles for student education about the importance of telling someone early and seeking support if they become overwhelmed, as well as parent education about how to inoculate students against such secrecy, and how to navigate such disclosures by students. This does not necessarily mean that if students disclose that they are in academic arrears that they should automatically be “forgiven” all of the arrears without accountability (thereby contributing to perceptions of weak sanctions and diminished learning about personal responsibility). Rather, although renegotiation of certain requirements while still maintaining some sanctions might be appropriate in some circumstances, there might also be a role for supporting students to take responsibility by accepting certain consequences, while simultaneously offering the opportunity to begin again with a new, improved plan and approach.

IV. Emotional, Physical, and Social Cues Can Influence Academic (Dis)Honesty and the Influence of Physical and Social Cues Can Also Be Mediated by Emotional Responses

Research—Emotional cues. In terms of emotional influences on dishonesty, incidental anxiety has been associated with increased unethical behavior, and this is mediated by perceptions of threat (Kouchaki & Desai, 2015). In addition, Effron and colleagues (2015) identified a mediating role for anticipated regret in what they termed a “cheat-at-the-end effect” that is consistent with what has been observed in other research on academic dishonesty (Abdolmohammdi & Baker, 2007). Specifically, individuals who had a limited number of opportunities to lie for self-benefit in the absence of detection had three times greater odds of cheat-

ing at the end of the series of opportunities than at the beginning. Anticipatory regret about having given up an opportunity for self-beneficial action mediated the effect.

Practical implications—Emotional cues. Although it is typically outside of the role of faculty to provide specific interventions for student anxiety that is incidental to a particular course, faculty attentiveness to signs of emotional difficulties and referral of students to support services is useful. In addition, to decrease student anxiety within courses, discussions at the outset of term on the roles and responsibilities of both professors and students can provide transparency and predictability, thereby reducing anxiety about the unknown. Also, encouraging and supporting students in the practice of self-compassion in relation to academic shortfalls or struggles can be important. Self-compassion comprises three aspects, including kindness toward oneself rather than critical self-judgment in the face of failure; awareness that feelings of inadequacy are common experiences shared by all individuals rather than unique to a specific person; and, observing negative thoughts and feelings rather than denying or overidentifying with them (Neff, Nsieh, & Dejitterat, 2005). Because self-compassion is negatively associated with anxiety and positively associated with the use of adaptive coping techniques in response to academic failure (Neff et al., 2005), instructor efforts to support and encourage self-compassion among students would likely promote integrity. In relation to anticipatory regret associated with the “cheat-at-the-end” effect, those who teach might check assignments most carefully toward the end of a term and not assume that absence or low levels of misconduct found early in the term comprise a consistent pattern for the entire course (Effron, Bryan, & Murnighan, 2015).

Research—Physical cues. Certain factors in the physical environment can also influence the likelihood of (dis)honesty and this can be mediated by emotional responses. For example, cheating is more likely when students observe an abundance versus scarcity of wealth (Gino & Pierce, 2009), and this might reflect perceptions of inequity and feelings of envy toward the wealth of others. Similarly, exposure to monetary cues has been associated with increased cheating, but this can be offset by inducing self-reflection (Gino & Mogilner, 2014). Alter-

nately, conditions involving diminished brightness obtained through dimmed lighting or the use of sunglasses were associated with greater dishonesty and selfishness, respectively (Zhong, Bohns, & Gino, 2010), and the latter of these relationships was mediated by a false sense of anonymity. In addition, in experimental research, a range of stimuli such as video clips, everyday products associated with bodily functions, and recollection of disgusting experiences have been found to invoke disgust in individuals, thereby signaling potential harm and contributing to self-protective behaviors associated with decreased ethicality (Winterich, Mittal, & Morales, 2014). As indicated by Winterich and colleagues (2014), this suggests that unclean environments including “dirty workplaces [and] classrooms” can lead to self-interested, unethical behaviors. Importantly, opportunities for cleansing were found to mitigate these effects.

Practical implications—Physical cues. With regard to monetary symbols or cues that might be present in the physical environments within certain faculties (e.g., brand images or other symbols of wealth or privilege displayed or discussed in schools of business), Gino and Mogilner (2014) identified that because inducing self-reflection can enhance honesty, use of opportunities for self-reflection might be helpful. Similarly, increasing the brightness in rooms by opening blinds and doors and making use of available lighting might decrease dishonesty. In relation to unclean physical environments, a few moments spent “airing out” or tidying exam rooms prior to student arrival, and offering use of hand sanitizers and tissues during exams (particularly at cold and flu seasons) might help to offset effects of unclean environments (Winterich et al., 2014).

Research—Social cues. Elements of the social environment have also been associated with dishonesty. For example, academic dishonesty is more common when students believe that it is occurring among their peers (McCabe & Treviño, 1993; McCabe et al., 2001, 2006; Megehee & Spake, 2008), and this might be compounded by the fact that at least certain groups of students significantly overestimate the extent to which others are cheating (Chapman, Davis, Toy, & Wright, 2004).

An additional social influence on dishonesty is that both acceptance of cheating and actual cheating behaviors are inversely related to per-

ceptions of instructor engagement, competence, and ethicality as reflected in caring or just behavior toward students (MacGregor & Stuebs, 2012; McKendall, Klein, Levenburg, & de la Rosa, 2010; Murdock, Miller, & Goetzinger, 2007). Such findings are consistent with behavioral ethics research in which perceived inequity during interaction with another person is associated with increased probability of dishonesty in subsequent interactions with that same person (Houser, Vetter, & Winer, 2012). This might reflect perceptions that the other person is failing to demonstrate established social norms of fairness, which enables rationalization of one’s own dishonesty. On an important related note, perceived inequity in the form of perceived threats to one’s social group identity is associated with higher dishonesty, and this has been found to be mediated by perceptions that such threats are not simply occasional occurrences, but rather, reflective of ongoing disrespect and devaluation of that social group (Belmi, Barragan, Neale, & Cohen, 2015).

Practical implications—Social cues. In terms of the overestimation of academic dishonesty among students (Chapman et al., 2004) and the association between perceived peer behavior and dishonesty (McCabe et al., 2006), it is important for faculty to try to decrease false perceptions about the frequency of dishonesty by others. For example, McCabe and colleagues (2006) recommended decreasing perceptions of cheating by decreasing opportunities for it. They offered specific examples, including using several different versions of exams across different sections of a course; using different assignments in different academic terms; building individualized components into assignments (e.g., use of the same analytical tools on different exemplars); and, prohibiting the use of unnecessary electronic devices during exams. In addition to these types of strategies, there might well be an important role for use of a social norming campaign (Chapman et al., 2004). Social norming campaigns are used to decrease undesirable and potentially dangerous behaviors such as alcohol consumption within given populations. These campaigns are designed to decrease concerning behaviors by de-biasing the inaccurate and inflated perceptions that individuals often hold about the prevalence and degree of certain behaviors among others within their population (Blanton, Köblitz, & McCaul,

2008). Such campaigns could first survey a specific population of students to obtain both perceptions and accurate information about the actual prevalence and degree of a given behavior such as dishonesty within that population. When data indicated gaps between perceptions and actual behavior such that the behavior in question was actually less common than individuals perceived, key messages aimed at correcting distorted perceptions and changing behavior in positive ways are developed. These are then broadly distributed to the population through poster, social media or other methods (Blanton et al., 2008) and evaluated for their effectiveness.

However, as argued by Blanton and colleagues (2008), among the potential limitations of social norming is that individuals might conflate their overly high estimations of the prevalence of a given behavior with the comfort level that they perceive others to have with that behavior. This can result in a situation in which individuals are engaging in a behavior both because they perceive it to be common among their peers, and also, because they perceive that their peers are comfortable with it, which might not be the case. Hence, Blanton and colleagues suggested that it can also be important to assess and correct any false beliefs individuals might hold that their peers are comfortable engaging in a specific behavior. They argued that to the extent to which falsely inflated perceptions about the comfort that others have with engaging in a particular behavior can be corrected, this is likely to empower students to attend more closely to and act upon their own ethical values.

Research on cues in the social environment also suggests the importance of instructor competence, engagement, fairness and care (MacGregor & Stuebs, 2012; McKendall et al., 2010; Murdock et al., 2007). On a policy level, these findings suggest a role for inclusion of these qualities in selection, training, evaluation or promotion. On a teaching level, these findings suggest the importance of fairness in course expectations and evaluative components, as well as faculty participation in ongoing professional and course development, as these would likely contribute to student perceptions of faculty competence and promote student engagement with course materials. Findings on the inverse relationship between academic dishonesty and professor engagement and care for

students also suggest the importance of faculty becoming effective steward of their own well-being, and practicing compassion with themselves. Specifically, adults who reflect the characteristics of self-compassion identified earlier (i.e., kindness vs. criticality toward self; understanding that personal suffering is common among humanity rather than unique to oneself; and, being observant of negative thoughts and feelings rather than denying or overidentifying with them) are also more likely to be compassionate with others (Neff & Pommier, 2012).

In addition, in relation to the potential role of perceived inequity, particular attention needs to be given to the potential role of bias or discrimination against members of particular social groups, including implicit forms. Implicit forms of bias are particularly challenging, because they can occur below the level of conscious awareness (Greenwald & Banaji, 1995), even among faculty members who on a conscious level are deeply committed to equity (Dovidio & Gaertner, 2004), and because of their subtlety, be unrecognized by faculty even though noticed by students. Practical strategies for reducing the impact of such biases are discussed by Pearson, Dovidio, and Gaertner (2009).

V. Depletion of Self-Control Is Associated With Dishonesty, But This Is Both a Mediated and Moderated Effect

Research. Self-control refers to an individual's capacity to resist or refrain from undesirable actions associated with temptations (Tangney, Baumeister, & Boone, 2004). Because self-control is dependent on a limited supply of self-regulatory resources that require rest and renewal, ego depletion (or impairments in) self-control can occur when individuals are required to exert it, even in areas that are unrelated to a focal task, without the opportunity to relax and replenish themselves (Baumeister, Vohs, & Tice, 2007; Muraven, Tice, & Baumeister, 1998).

Mead and colleagues (2009) demonstrated that although depletion of self-control in the form of a prior act of self-control did not affect actual performance on an assigned task, individuals did falsely claim more correct answers for financial gain than those who were nondepleted. Moreover, those who were depleted also demonstrated greater likelihood of subjecting

themselves to the temptation to cheat. Similarly, Gino, Schweitzer, Mead, and Ariely (2011) found that individuals who were depleted as a consequence of having regulated themselves during previous acts of self-control were more likely to engage in cheating, and that the relationship between depletion and cheating was mediated by moral awareness, which was decreased for those who were depleted. These outcomes can explain findings in the academic dishonesty literature that indicate that academic dishonesty is more common later in the day (Kouchaki & Smith, 2014) because, in general terms, and notwithstanding individual sleep chronotype or time of day at which someone is predisposed to cyclically sleep (Gunia, Barnes, & Sah, 2014), students would likely be more depleted as the day progressed. In addition, Yam, Chen, and Reynolds (2014) found that social consensus about the ethicality of an action moderated the relationship between ego depletion and unethical behavior such that ego depletion was associated with increased unethical behavior only when lower levels of social consensus existed about the ethicality of the behavior, which is true of academic dishonesty (Reynolds & Ceranic, 2007).

Practical implications. Notwithstanding research demonstrating that a highly central or highly important moral identity is associated with less dishonesty when individuals are depleted (Gino et al., 2011), students should receive coaching and support on how to protect, preserve and replenish their self-regulatory resources and environments. A healthy balance between school-related goals and recreational and rest activities should be encouraged. Given the influence of ego depletion on dishonesty, consideration should be given to the number, size and weighting of evaluative components that are used within and throughout courses. In addition, although practical considerations likely impose constraints on the time of day at which exams are scheduled, accommodations should be supported for individuals diagnosed within the *Diagnostic and Statistical Manual of Mental Disorders* (5th ed., *DSM-5*) system (American Psychiatric Association, 2013) as suffering from circadian rhythm sleep-wake disorders characterized by persistent discrepancies between their cyclical sleep-wake pattern and the sleep-wake schedule required in their environment. Accommodations for those suffer-

ing from such disorders would likely enable better performance, and mitigate what might be unintentional forms of dishonesty associated with this predicament. Indeed, research demonstrates that the “morning morality effect” (Kouchaki & Smih, 2014) occurs only for “morning larks,” but that there is also an evening effect demonstrating greater ethicality later in the day among “night owls” (Gunia, Barnes, & Sah, 2014). Finally, the association between ego depletion and increased unethical behavior in the context of lower levels of social consensus about the ethicality of the behavior (Yam et al., 2014) indicates the importance of teaching students in an ongoing way about the nature and types of academic dishonesty.

VI. Seemingly Positive Activities Like Goal Setting Can Contribute to Academic Dishonesty

Research. Although goal setting is often effective for enhancing performance in both educational and workplace settings, it can also have unintended negative consequences. Schweitzer and colleagues (2004) found, at least for externally applied versus self-determined goals, individuals showed an increased probability of claiming enhanced productivity relative to those who did not have goals; and also, individuals were more likely to claim greater productivity than they actually achieved when they were close to rather than far from meeting their goals. Welsh and Ordóñez (2014b) demonstrated that both the relationship between goal difficulty and ego depletion, as well as the relationship between ego depletion and unethical behavior were moderated by the number of consecutive goals assigned, such that ongoing use of high goals led to higher levels of unethical behavior. Moreover, individuals who had high but decreasing goals engaged in a greater number of unethical behaviors than individuals who were assigned increasingly higher goals, even at the point at which goals were the same for both groups, suggesting that when individuals are given high, ego-depleting goals at the outset, they might not be able to recover from depletion.

Practical implications. Consideration needs to be given to balancing the potential positive and negative consequences of goal setting; to criteria for establishing appropriately

challenging rather than depleting goals; and, to potential drawbacks of using consecutive high goal periods. Indeed, [Welsh and Ordóñez \(2014b\)](#) found across two conditions that when individuals began with difficult goals, they reported feeling more depleted simply upon understanding the goals without yet even having begun to attempt them. Hence, faculty should be cautious about the initial use of highly difficult goals within their courses. This is also an important consideration for parents who might have specific performance expectations in mind for their children (e.g., [Burnett, Smith, & Wesel, 2016](#)). With regard to increased dishonesty associated with being close to (rather than far from) achieving specific performance goals (i.e., a certain grade), it would be useful for faculty to foster a focus on mastery rather than performance.

Summary and Future Directions

The purpose of this article was to draw upon the burgeoning field of behavioral ethics in order to highlight the implications of a dual processing framework for understanding academic dishonesty, and for offering practical insights into its prevention. Six key themes from within behavioral ethics were provided. These pointed to the importance of developing a broader understanding of how academic (dis)honesty occurs, including consideration of reflective, conscious deliberation as well as reflexive, nonconscious judgment; rationality as well as emotionality; and, the ways in which conscious and nonconscious situational cues can influence the salience of individual moral standards in particular decision-making contexts ([Banaji et al., 2003](#); [Haidt, 2001](#); [Monin et al., 2007](#); [Reynolds, 2006](#); [Welsh & Ordóñez, 2014a, 2014b](#)). In highlighting the role of reflexive and sometimes emotionally laden and contextually influenced decisions, this article complements previous approaches to academic integrity that have focused specifically on conscious, rational reasoning (e.g., [Caldwell, 2010](#)).

One very important and complex set of issues raised by consideration of dual processing perspectives is the extent to, and conditions under which individuals should be found culpable for (academically dishonest) actions that occur below the level of conscious awareness, and the nature of the penalties that should be applied in

such circumstances. The discussion offered here is not meant to suggest that research from within behavioral ethics should be used to normalize, justify or legitimize academic dishonesty. Indeed, from a legal perspective it is interesting to note that in regard to at least certain types of actions such as discrimination, the courts have established potential for liability even when these actions occur below the level of conscious awareness (see, [Banaji et al., 2003](#)). Although scholars of behavioral ethics continue to conduct research that ultimately might influence analysis of such issues (e.g., [Cushman, 2008](#); [Cushman, Dreber, Wang, & Costa, 2009](#); [Pizarro, Uhlmann, & Bloom, 2003](#)), questions of responsibility for nonconscious actions are *normative* concerns receiving increased attention among philosophers of cognitive science ([King & Carruthers, 2012](#); [Levy, 2014](#)). Although it is beyond the scope of this article to develop normative arguments on this set of issues, further scholarly consideration of these is warranted.

Future research should also evaluate the generalizability of empirical findings and practical implications described here to actual class settings. In this regard, [Zhang and colleagues \(2014\)](#) identified the importance of evaluating structural components such as environmental incentives, opportunities or choices, as well as values-based components such as the internal moral worlds of individuals. Because context matters, evaluation needs to occur in diverse applied settings and include consideration of actual methods and impacts of interventions, as well as boundary conditions.

References

- Abdalmohammadi, M. J., & Baker, C. R. (2007). The relationship between moral reasoning and plagiarism in accounting courses: A replication study. *Issues in Accounting Education, 22*, 45–55. <http://dx.doi.org/10.2308/iace.2007.22.1.45>
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: Author.
- Banaji, M. R., Bazerman, M. H., & Chugh, D. (2003). How (un)ethical are you? *Harvard Business Review, 81*, 56–64, 125. Retrieved from <https://hbr.org>
- Baumeister, R. F., Vohs, K. D., & Tice, D. M. (2007). The strength model of self-control. *Current Directions in Psychological Science, 16*, 351–

403. <http://dx.doi.org/10.1111/j.1467-8721.2007.00534.x>
- Belmi, P., Barragan, R. C., Neale, M. A., & Cohen, G. L. (2015). Threats to social identity can trigger social deviance. *Personality and Social Psychology Bulletin*, *41*, 467–484. <http://dx.doi.org/10.1177/0146167215569493>
- Blanton, H., Köblitz, A., & McCaul, K. D. (2008). Misperceptions about norm misperceptions: Descriptive, injunctive, and affective “social norming” efforts to change health behaviors. *Social and Personality Psychology Compass*, *2*, 1379–1399. <http://dx.doi.org/10.1111/j.1751-9004.2008.00107.x>
- Bloodgood, J. M., Turnley, W. H., & Mudrack, P. (2008). The influence of ethics instruction, religiosity, and intelligence on cheating behavior. *Journal of Business Ethics*, *82*, 557–571. <http://dx.doi.org/10.1007/s10551-007-9576-0>
- Boehm, P., Justice, M., & Weeks, S. (2009). Promoting academic integrity in higher education. *The Community College Enterprise*, *15*, 45–61. Retrieved from <http://www.schoolcraft.edu/a-z-index/community-college-enterprise#.V7nt3aL08mc>
- Broeckelman-Post, M. A. (2008). Faculty and student classroom influences on academic dishonesty. *IEEE Transactions on Education*, *51*, 206–211. <http://dx.doi.org/10.1109/TE.2007.910428>
- Bryan, C. J., Adams, G. S., & Monin, B. (2013). When cheating would make you a cheater: Implicating the self prevents unethical behavior. *Journal of Experimental Psychology: General*, *142*, 1001–1005. <http://dx.doi.org/10.1037/a0030655>
- Burnett, A. J., Smith, T. M. E., & Wessel, T. M. (2016). Use of the social cognitive theory to frame university students’ perceptions of cheating. *Journal of Academic Ethics*, *14*, 49–69. <http://dx.doi.org/10.1007/s10805-015-9252-4>
- Caldwell, C. (2010). A ten-step model for academic integrity: A positive approach for business schools. *Journal of Business Ethics*, *92*, 1–13. <http://dx.doi.org/10.1007/s10551-009-0144-7>
- Caruso, E., Epley, N., & Bazerman, M. H. (2006). The costs and benefits of undoing egocentric responsibility assessments in groups. *Journal of Personality and Social Psychology*, *91*, 857–871. <http://dx.doi.org/10.1037/0022-3514.91.5.857>
- Chapman, K. J., Davis, R., Toy, D., & Wright, L. (2004). Academic integrity in the business school environment: I’ll get by with a little help from my friends. *Journal of Marketing Education*, *26*, 236–249. <http://dx.doi.org/10.1177/0273475304268779>
- Christensen Hughes, J. M., & McCabe, D. L. (2006). Understanding academic misconduct. *Canadian Journal of Higher Education*, *36*, 49–63. Retrieved from <http://www.ingentaconnect.com/content/csshe/cjhe>
- Chugh, D., Bazerman, M. H., & Banaji, M. (2005). Bounded ethicality as a psychological barrier to recognizing conflicts of interest. In D. Moore, D. Cain, G. Loewenstein, & M. Bazerman (Eds.), *Conflict of interest: Challenges and solutions in business, law, medicine, and public policy* (pp. 74–95). New York, NY: Cambridge University Press. <http://dx.doi.org/10.1017/CBO9780511610332.006>
- Cressey, D. R. (1950). The criminal violation of financial trust. *American Sociological Review*, *15*, 738–743. Retrieved from <http://asr.sagepub.com> <http://dx.doi.org/10.2307/2086606>
- Crittenden, V. L., Hanna, R. C., & Peterson, R. A. (2009). The cheating culture: A global societal phenomenon. *Business Horizons*, *52*, 337–346. <http://dx.doi.org/10.1016/j.bushor.2009.02.004>
- Cushman, F., Dreber, A., Wang, Y., & Costa, J. (2009). Accidental outcomes guide punishment in a ‘trembling hand’ game. *PLoS ONE*, *5*, 1–7.
- Cushman, F. (2008). Crime and punishment: Distinguishing the roles of causal and intentional analyses in moral judgment. *Cognition*, *108*, 353–380. <http://dx.doi.org/10.1016/j.cognition.2008.03.006>
- De Cremer, D., & Tenbrunsel, A. E. (2012). On understanding the need for a behavioral business ethics approach. In D. De Cremer & A. E. Tenbrunsel (Eds.), *Behavioral business ethics: Shaping an emerging field* (pp. 3–16). New York, NY: Routledge.
- Dovidio, J. F., & Gaertner, S. L. (2004). Aversive racism. In J. M. Olson & M. P. Zanna (Eds.), *Advances in experimental social psychology* (Vol. 36, pp. 1–52). San Diego, CA: Academic Press.
- Effron, D. A., Bryan, C. J., & Murnighan, J. K. (2015). Cheating at the end to avoid regret. *Journal of Personality and Social Psychology*, *109*, 395–414. <http://dx.doi.org/10.1037/pspa0000026>
- Fishman, T. (Ed.). (2013). *The fundamental values of academic integrity* (2nd ed.). Clemson, SC: Clemson University International Center for Academic Integrity. Retrieved from http://www.academicintegrity.org/ica/assets/Revised_FV_2014.pdf
- Gallant, T. B., & Drinan, P. (2006). Organizational theory and student cheating: Explanation, responses and strategies. *The Journal of Higher Education*, *77*, 839–860. <http://dx.doi.org/10.1353/jhe.2006.0041>
- Gino, F., Ayal, S., & Ariely, D. (2013). Self-serving altruism? The lure of unethical actions that benefit others. *Journal of Economic Behavior & Organization*, *93*, 285–292. <http://dx.doi.org/10.1016/j.jebo.2013.04.005>
- Gino, F., & Mogilner, C. (2014). Time, money, and morality. *Psychological Science*, *25*, 414–421. <http://dx.doi.org/10.1177/0956797613506438>
- Gino, F., & Pierce, L. (2009). The abundance effect: Unethical behavior in the presence of wealth. *Organizational Behavior and Human Decision Pro-*

- cesses, 109, 142–155. <http://dx.doi.org/10.1016/j.obhdp.2009.03.003>
- Gino, F., Schweitzer, M. E., Mead, N. L., & Ariely, D. (2011). Unable to resist temptation: How self-control depletion promotes unethical behavior. *Organizational Behavior and Human Decision Processes*, 115, 191–203. <http://dx.doi.org/10.1016/j.obhdp.2011.03.001>
- Gneezy, U., & Rustichini, A. (2000). A fine is a price. *Journal of Legal Studies*, 29, 1–17. <http://dx.doi.org/10.1086/468061>
- Greenwald, A. G., & Banaji, M. R. (1995). Implicit social cognition: Attitudes, self-esteem, and stereotypes. *Psychological Review*, 102, 4–27. <http://dx.doi.org/10.1037/0033-295X.102.1.4>
- Gullifer, J., & Tyson, G. (2010). Exploring university students' perceptions of plagiarism: A focus group study. *Studies in Higher Education*, 35, 463–481. <http://dx.doi.org/10.1080/03075070903096508>
- Gunia, B. C., Barnes, C. M., & Sah, S. (2014). The morality of larks and owls: Unethical behavior depends on chronotype as well as time of day. *Psychological Science*, 25, 2272–2274. <http://dx.doi.org/10.1177/0956797614541989>
- Haidt, J. (2001). The emotional dog and its rational tail: A social intuitionist approach to moral judgment. *Psychological Review*, 108, 814–834. <http://dx.doi.org/10.1037/0033-295X.108.4.814>
- Houser, D., Vetter, S., & Winer, J. (2012). Fairness and cheating. *European Economic Review*, 56, 1645–1655. <http://dx.doi.org/10.1016/j.eurocorev.2012.08.001>
- Kahneman, D., & Tversky, A. (1979). Intuitive prediction: Biases and corrective procedures. *TIMS Studies in Management Science*, 12, 313–327. Retrieved from <http://www.dtic.mil/dtic/tr/fulltext/u2/a047747.pdf>
- Kaufman, H. E. (2008). Moral and ethical issues related to academic dishonesty on college campuses. *Journal of College and Character*. Advance online publication. <http://dx.doi.org/10.2202/1940-1639.1187>
- Kern, M. C., & Chugh, D. (2009). Bounded ethicality: The perils of loss framing. *Psychological Science*, 20, 378–384. <http://dx.doi.org/10.1111/j.1467-9280.2009.02296.x>
- King, M., & Carruthers, P. (2012). Moral responsibility and consciousness. *Journal of Moral Philosophy*, 9, 200–228. <http://dx.doi.org/10.1163/174552412X625682>
- Klein, H. A., Levenburg, N. M., McKendall, M., & Mothersell, W. (2007). Cheating during the college years: How do business school students compare? *Journal of Business Ethics*, 72, 197–206. <http://dx.doi.org/10.1007/s10551-006-9165-7>
- Kouchaki, M., & Desai, S. D. (2015). Anxious, threatened, and also unethical: How anxiety makes individuals feel threatened and commit unethical acts. *Journal of Applied Psychology*, 100, 360–375. <http://dx.doi.org/10.1037/a0037796>
- Kouchaki, M., & Smith, I. H. (2014). The morning morality effect: The influence of time of day on unethical behavior. *Psychological Science*, 25, 95–102. <http://dx.doi.org/10.1177/0956797613498099>
- LaDuke, R. D. (2013). Academic dishonesty today, unethical practices tomorrow? *Journal of Professional Nursing*, 29, 402–406. <http://dx.doi.org/10.1016/j.profnurs.2012.10.009>
- Levy, N. (2014). Consciousness, implicit attitudes and moral responsibility. *Noûs (Detroit, Mich.)*, 48, 21–40. <http://dx.doi.org/10.1111/j.1468-0068.2011.00853.x>
- MacGregor, J., & Stuebs, M. (2012). To cheat or not to cheat: Rationalizing academic impropriety. *Accounting Education*, 21, 265–287. <http://dx.doi.org/10.1080/09639284.2011.617174>
- Marsh, R. L., Landau, J. D., & Hicks, J. L. (1997). Contributions of inadequate source monitoring to unconscious plagiarism during idea generation. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 23, 886–897. <http://dx.doi.org/10.1037/0278-7393.23.4.886>
- Mazar, N., Amir, O., & Ariely, D. (2008). The dishonesty of honest people: A theory of self-concept maintenance. *Journal of Marketing Research*, 45, 633–644. <http://dx.doi.org/10.1509/jmkr.45.6.633>
- McCabe, D. L. (2005). Cheating among college and university students: A North American perspective. *International Journal of Educational Integrity*, 1, 1–11.
- McCabe, D. L., Butterfield, K. D., & Treviño, L. K. (2006). Academic dishonesty in graduate business programs: Prevalence, causes, and proposed action. *Academy of Management Learning & Education*, 5, 294–305. <http://dx.doi.org/10.5465/AMLE.2006.22697018>
- McCabe, D. L., & Treviño, L. K. (1993). Academic dishonesty: Honor codes and other contextual influences. *The Journal of Higher Education*, 64, 522–538. <http://dx.doi.org/10.2307/2959991>
- McCabe, D. L., Treviño, L. K., & Butterfield, K. D. (2001). Cheating in academic institutions: A decade of research. *Ethics & Behavior*, 11, 219–232. http://dx.doi.org/10.1207/S15327019EB1103_2
- McCabe, D. L., Treviño, L. K., & Butterfield, K. D. (2002). Honor codes and other contextual influences on academic integrity: A replication and extension to modified honor code settings. *Research in Higher Education*, 43, 357–378. <http://dx.doi.org/10.1023/A:1014893102151>
- McKendall, M., Klein, H., Levenburg, N., & de la Rosa, D. (2010). College student cheating and perceived instructor fairness. *Journal of the Academy of Business Education*, 11, 14–32.

- Mead, N. L., Baumeister, R. F., Gino, F., Schweitzer, M. E., & Ariely, D. (2009). Too tired to tell the truth: Self-control resource depletion and dishonesty. *Journal of Experimental Social Psychology*, *45*, 594–597. <http://dx.doi.org/10.1016/j.jesp.2009.02.004>
- Megehee, C. M., & Spake, D. F. (2008). The impact of perceived peer behavior, probable detection and punishment severity on student cheating behavior. *Marketing Education Review*, *18*, 5–19. <http://dx.doi.org/10.1080/10528008.2008.11489033>
- Monin, B., Pizarro, D. A., & Beer, J. S. (2007). Deciding versus reacting: Conceptions of moral judgment and the reason-affect debate. *Review of General Psychology*, *11*, 99–111. <http://dx.doi.org/10.1037/1089-2680.11.2.99>
- Muraven, M., Tice, D. M., & Baumeister, R. F. (1998). Self-control as limited resource: Regulatory depletion patterns. *Journal of Personality and Social Psychology*, *74*, 774–789. <http://dx.doi.org/10.1037/0022-3514.74.3.774>
- Murdock, T. B., & Anderman, E. M. (2006). Motivational perspectives on student cheating: Toward an integrated model of academic dishonesty. *Educational Psychologist*, *41*, 129–145. http://dx.doi.org/10.1207/s15326985ep4103_1
- Murdock, T. B., Miller, A. D., & Goetzinger, A. (2007). Effects of classroom context on university students' judgments about cheating: Mediating and moderating processes. *Social Psychology of Education*, *10*, 141–169. <http://dx.doi.org/10.1007/s11218-007-9015-1>
- Neff, K. D., Nsich, Y.-P., & Dejitterat, K. (2005). Self-compassion, achievement goals, and coping with academic failure. *Self and Identity*, *4*, 263–287. <http://dx.doi.org/10.1080/13576500444000317>
- Neff, K. D., & Pommier, E. (2012). The relationship between self-compassion and other-focused concern among college undergraduates, community adults, and practicing mediators. *Self and Identity*, *12*, 1–17.
- O'Neill, H. M., & Pfeiffer, C. A. (2012). The impact of honour codes and perceptions of cheating on academic cheating behaviors, especially for MBA bound undergraduates. *Accounting Education*, *21*, 231–245. <http://dx.doi.org/10.1080/09639284.2011.590012>
- Pearson, A. R., Dovidio, J. F., & Gaertner, S. L. (2009). The nature of contemporary prejudice: Insights from aversive racism. *Social and Personality Psychology Compass*, *3*, 1–25.
- Pizarro, D. A., Uhlmann, E., & Bloom, P. (2003). Causal deviance and attribution of moral responsibility. *Journal of Experimental Social Psychology*, *39*, 653–660. [http://dx.doi.org/10.1016/S0022-1031\(03\)00041-6](http://dx.doi.org/10.1016/S0022-1031(03)00041-6)
- Prescott, P. A. (1989). Academic misconduct: Considerations for educational administrators. *Journal of Professional Nursing*, *5*, 283–287. [http://dx.doi.org/10.1016/8755-7223\(89\)90041-0](http://dx.doi.org/10.1016/8755-7223(89)90041-0)
- Prochaska, V. (2012). Teachers can have an effect: Strategies for encouraging ethical student behavior. In R. E. Landrum & M. McCarthy (Eds.), *Teaching ethically: Challenges and opportunities*. Washington, DC: American Psychological Association. <http://dx.doi.org/10.1037/13496-007>
- Reynolds, S. J. (2006). A neurocognitive model of the ethical decision-making process: Implications for study and practice. *Journal of Applied Psychology*, *91*, 737–748. <http://dx.doi.org/10.1037/0021-9010.91.4.737>
- Reynolds, S. J., & Ceranic, T. L. (2007). The effects of moral judgment and moral identity on moral behavior: An empirical examination of the moral individual. *Journal of Applied Psychology*, *92*, 1610–1624. <http://dx.doi.org/10.1037/0021-9010.92.6.1610>
- Reynolds, S. J., Leavitt, K., & DeCelles, K. A. (2010). Automatic ethics: The effects of implicit assumptions and contextual cues on moral behavior. *Journal of Applied Psychology*, *95*, 752–760. <http://dx.doi.org/10.1037/a0019411>
- Rick, S., Loewenstein, G., Monterosso, J. R., Langleben, D. D., Mazar, N., Amir, O., & Ariely, D. (2008). Commentaries and rejoinder to “The dishonesty of honest people.” *Journal of Marketing Research*, *45*, 645–653. <http://dx.doi.org/10.1509/jmkr.45.6.645>
- Ruedy, N. E., Moore, C., Gino, F., & Schweitzer, M. E. (2013). The cheater's high: The unexpected affective benefits of unethical behavior. *Journal of Personality and Social Psychology*, *105*, 531–548. <http://dx.doi.org/10.1037/a0034231>
- Schweitzer, M. E., Ordóñez, L., & Douma, B. (2004). Goal setting as a motivator of unethical behavior. *Academy of Management Journal*, *47*, 422–432. <http://dx.doi.org/10.2307/20159591>
- Shephard, K., Trotman, T., Fumari, M., & Löfström, E. (2015). Teaching research integrity in higher education: Policy and strategy. *Journal of Higher Education Policy and Management*, *37*, 615–632. <http://dx.doi.org/10.1080/1360080X.2015.1102823>
- Shu, L. L., Mazar, N., Gino, F., Ariely, D., & Bazerman, M. H. (2012). Signing at the beginning makes ethics salient and decreases dishonest self-reports in comparison to signing at the end. *Proceedings of the National Academy of Sciences of the United States of America*, *109*, 15197–15200. <http://dx.doi.org/10.1073/pnas.1209746109>
- Sierra, J. J., & Hyman, M. R. (2006). A dual-process model of cheating intentions. *Journal of Marketing Education*, *28*, 193–204. <http://dx.doi.org/10.1177/0273475306291464>
- Sutherland-Smith, W. (2010). Retribution, deterrence and reform: The dilemmas of plagiarism management in universities. *Journal of Higher Education*

- Policy and Management*, 32, 5–16. <http://dx.doi.org/10.1080/13600800903440519>
- Sutherland-Smith, W. (2014). Legality, quality assurance and learning: Competing discourses of plagiarism management in higher education. *Journal of Higher Education Policy and Management*, 36, 29–42. <http://dx.doi.org/10.1080/1360080X.2013.844666>
- Tangney, J. P., Baumeister, R. F., & Boone, A. L. (2004). High self-control predicts good adjustment, less pathology, better grades, and interpersonal success. *Journal of Personality*, 72, 271–324. <http://dx.doi.org/10.1111/j.0022-3506.2004.00263.x>
- Tenbrunsel, A. E., Diekmann, K. A., Wasde-Benzoni, K. A., & Bazerman, M. H. (2010). The ethical mirage: A temporal explanation as to why we are not as ethical as we think we are. *Research in Organizational Behavior*, 30, 153–173. <http://dx.doi.org/10.1016/j.riob.2010.08.004>
- Tenbrunsel, A. E., & Messick, D. M. (1999). Sanctioning systems, decision frames, and co-operation. *Administrative Science Quarterly*, 44, 684–707. <http://dx.doi.org/10.2307/2667052>
- Tenbrunsel, A. E., & Messick, D. M. (2004). Ethical fading: The role of self-deception in unethical behavior. *Social Justice Research*, 17, 223–236. <http://dx.doi.org/10.1023/B:SORE.0000027411.35832.53>
- Valentine, K. (2006). Plagiarism as literacy practice: Recognizing and rethinking ethical binaries. *College Composition and Communication*, 58, 89–109. Retrieved from <http://www.jstor.org/stable/20456924>
- Welsh, D. T., & Ordóñez, L. D. (2014a). Conscience without cognition: The effects of subconscious priming on ethical behavior. *Academy of Management Journal*, 57, 723–742. <http://dx.doi.org/10.5465/amj.2011.1009>
- Welsh, D. T., & Ordóñez, L. D. (2014b). The dark side of consecutive high performance goals: Linking goal setting, depletion, and unethical behavior. *Organizational Behavior and Human Decision Processes*, 123, 79–89. <http://dx.doi.org/10.1016/j.obhdp.2013.07.006>
- Winterich, K. P., Mittal, V., & Morales, A. C. (2014). Protect thyself: How affective self-protection increases self-interested, unethical behavior. *Organizational Behavior and Human Decision Processes*, 125, 151–161. <http://dx.doi.org/10.1016/j.obhdp.2014.07.004>
- Yam, K. C., Chen, X.-P., & Reynolds, S. J. (2014). Ego depletion and its paradoxical effects on ethical decision making. *Organizational Behavior and Human Decision Processes*, 124, 204–214. <http://dx.doi.org/10.1016/j.obhdp.2014.03.008>
- Zhang, T., Gino, F., & Bazerman, M. H. (2014). Morality rebooted: Exploring simple fixes to our moral bugs. *Research in Organizational Behavior*, 34, 63–79. <http://dx.doi.org/10.1016/j.riob.2014.10.002>
- Zhong, C.-B., Bohns, V. K., & Gino, F. (2010). Good lamps are the best police: Darkness increases self-interested behavior and dishonesty. *Psychological Science*, 21, 311–314. <http://dx.doi.org/10.1177/0956797609360754>

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