

# Moral Identities, Social Anxiety, and Academic Dishonesty Among American College Students

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Academic dishonesty is a persistent problem in the American educational system. The present investigation examined how reports of academic cheating related to students' emphasis on their moral identities and their sensitivity to social evaluation. Seventy college students at a large southeastern university completed a battery of surveys. Symptoms of social anxiety were positively correlated with recall of academic cheating. Additionally, relative to students who placed less importance on their moral identities, students who placed more importance on their moral identities recalled significantly fewer instances of cheating. In summary, these findings suggest that students are less likely to cheat on their school work when they place greater emphasis on their moral identity and are less sensitive to social evaluation. Practical interventions to rampant cheating in American schools are discussed.

Keywords: ethics, moral identity, college cheating

Students know they are completely judged by their grades. [Grades] are so important that we are willing to sacrifice our integrity in order to make a good impression. (Slobogin, 2002; para. 7)

If most American students believe that academic cheating hurts their character (Josephson, n.d.), why do three out of four undergraduates occasionally cheat anyway? Rampant cheating among college students represents a thought/action problem of moral functioning—explaining the psychological gap between moral understanding and moral action (Blasi, 1980; Lapsley & Narvaez, 2004). One solution to the thought/action problem of academic dishonesty is suggested in the

opening quote. Many college students cheat because their concerns over making a good impression override their need for integrity, hereafter referred to as the social anxiety hypothesis of academic cheating. In turn, college students who are more concerned with maintaining their integrity than pleasing others avoid cheating, hereafter referred to as the moral identity hypothesis of academic cheating. In this article I discuss the merits of these two hypotheses in explaining why American students cheat on their schoolwork.

### ANXIOUS TO GET AHEAD

Feelings of anxiety are common among members of the academy. Most college students learn to cope with their concerns over grades, but some students seem to worry obsessively about their academic performance (Sarason & Sarason, 1990, as cited in Leary & Kowalski, 1995). For example, feelings of test anxiety are positively related to symptoms of social anxiety. Students who worry about their schoolwork also tend to worry about embarrassing themselves in front of others. Often, anxious students learn to avoid social situations that trigger aversive feelings of anxiety. Arguably, a student's worry over failing school assignments represents a secondary reinforcer—he or she is really apprehensive of negative audience evaluations more so than failing a school assignment per se. This worry and preoccupation over audience evaluations may lead to decrements in a student's ability to study and concentrate on exams and papers. The social anxiety hypothesis of cheating suggests, for example, that a highly anxious student compensates for anticipated decrements in concentration by bringing crib sheets and other cheating devices into the testing environment.

The social anxiety hypothesis of academic cheating is indirectly supported by laboratory experiments in which college students lied, cheated, and stole from the experimenter to avoid appearing below average on bogus intelligence tests (e.g., Berger & Levin, 1977; Millham, 1974; Schlenker, 2006). In pretest situations, college students completed the Marlowe–Crowne Social Desirability Scale (Crowne & Marlowe, 1960), a popular measure of differences in sensitivity to disapproval (Crowne, 1979, as cited in Paulhus, 1991). Later in the lab, students worked on bogus intelligence tests rigged to make them fail. Students were then provided with opportunities to cheat to avoid appearing less than average. For example, the experimenter suddenly claimed that he or she had to leave the experiment for 15 min while the student worked on the test (Berger & Levin, 1977). Students were left alone to improve their test scores by stealing an answer key left behind on the experimenter's desk.

The “cheating” variable measured in laboratory research often conflated a student's willingness to lie and steal to create the desired impression (Millham, 1974; see also Schlenker, 2006). In other experimental manipulations where students did

not expect to fail, however, the Social Desirability Scale (Crowne & Marlowe, 1960) failed to predict which students engaged in unethical behavior. Therefore, students sensitive to disapproval relied on unethical behaviors to avoid rejection, not to curry approval above an “average” baseline. In sum, correlational data and laboratory experiments triangulate on a social anxiety hypothesis of academic dishonesty.

To review, laboratory experiments and correlational data suggest that academic cheating and feelings of social anxiety may be intertwined in a complex, approach–avoidance cycle for some college students. In line with this reasoning, Whitley (1998) argued that individual differences in sensitivity to social evaluation are a necessary component of a robust psychological model of academic dishonesty. His exhaustive review of the academic cheating literature noted a lack of empirical evidence on the possible links between cheating and social anxiety. A central purpose of this study was therefore to statistically document the psychological links between symptoms of social anxiety and academic dishonesty, which may elucidate solutions to the thought/action problem more broadly.

### THE MORAL IDENTITY

Some students may be less concerned with what others think of them and more concerned with adhering to an internal set of moral prescriptions that help define who they are as a person (i.e., their moral identity). The present investigation also explored the thought/action problem of academic dishonesty by measuring the relative centrality (i.e., importance) of a college student’s moral identity, defined here as a psychological structure that incorporates the prescriptive and universal ideals of justice, fairness, and beneficence into the self-concept (Blasi, 1984; Colby & Damon, 1992; Hardy & Carlo, 2005; Kohlberg, 1969; Lapsley & Narvaez, 2004; see also Kant, 1785/2002; Smith, 1759/1976). Blasi’s (1983, 1984) self theory of moral functioning introduced a psychological mechanism—the moral identity—to explain why people often commit acts that they believe are morally wrong. Definitions of the moral identity abound, such as an explicit theory of self as a moral agent that provides “existential motivation” (Moshman, 2004, p. 84) to care for others (see also Atkins, Hart, & Donnelly, 2004). According to moral identity theory, the relative importance of a person’s moral identity determines the width of the thought/action gap (Lapsley & Narvaez, 2004).

In the present investigation, moral identity theory predicted that a college student who claims a peripheral (i.e., unimportant) moral identity perceives a lack of personal responsibility for academic cheating. A peripheral moral identity allows a college student to cheat without incorporating the unethical act into his or her theory of self. In contrast, a student who claims a central moral identity perceives a high level of personal responsibility for academic dishonesty. In turn, the psycho-

logical need for self-consistency motivates him or her to avoid academic dishonesty, because cheating would activate aversive feelings of self-betrayal (Lapsley, 1996; as cited in Bergman, 2004).

To put it another way, students with a central moral identity seem to be concerned with the evaluations of an internal moral audience—the moral self. Students with peripheral moral identities seem to lack a salient internal moral audience—a “superego” (e.g., Freud, 1930/1989) or “conscience” (e.g., Mowrer, 1976)—that deters them from engaging in unethical acts like academic cheating. In short, the moral identity hypothesis of academic cheating predicts that students with central moral identities will recall significantly fewer instances of academic cheating relative to student with peripheral moral identities.

### MEASURING THE MORAL IDENTITY

There is a lack of consensus on how to conceptualize and operationalize the moral identity construct (Hardy & Carlo, 2005; Nucci, 2004). For example, authors often apply the concepts of “self” and “identity” interchangeably, even though these psychological constructs are not synonymous to self theorists (e.g., Baumeister, 1995). Moral identity theory will advance to the extent that the moral identity construct is clearly defined at both the conceptual and operational levels of analysis. Conceptually, the moral identity structure should include an individual’s personal theory of ethics.

To expound on this proposition, if an identity is defined as an individual’s explicit or implicit theory of self (e.g., Schlenker, 1980), then it follows that a moral identity structure contains—but is not limited to—a personal theory of right and wrong action. This premise begs the question of how personal ethical theories develop. Space limitations disallow a detailed analysis. In short, just as social scientists collaborate on a robust psychological theory of morality, a robust folk theory of morality is tested and refined over many generations to explain and predict human behavior (Heider, 1958/1982). A folk theory of morality persists across generations when it is good enough at explaining human behavior for individuals to satisfy their goals (e.g., Malle, 2006). In short, the moral identity structure probably contains a folk theory of ethics that explains why people lie, cheat, and steal from one another, as well as why people help one another, donate to charity, and engage in selfless acts of altruism.

The principal characteristic of a moral person is someone who commits to a principled ethic of justice, fairness, and beneficence (Walker, 2004). By logical extension, an immoral person demonstrates low commitment to a principled ethic. This inference does not imply that a person who rejects universal ethical principles is necessarily a nihilist. Instead, he or she endorses an ethic of expediency that justifies duplicity as a necessary evil to reach desired goals (e.g., Kohlberg, 1969;

Machiavelli, 1513/2001; Schlenker, 2006). Therefore, one method of measuring the centrality of the moral identity is to operationalize an individual's relative commitment to a principled ethic.

### THE INTEGRITY SCALE AS A MEASURE OF MORAL IDENTITY

Social psychologists rely upon different methods to measure endorsed ethical ideologies (Waterman, 1988), such as taxonomies that conceptualize ethical beliefs in a  $2 \times 2$  matrix (e.g., Forsyth, 1980) or as an individual difference variable (Schlenker, 2006). In the following sections, I argue that the Integrity Scale (Schlenker, 2006) is a reliable and valid measure of the centrality of a person's moral identity. Integrity Scale items representing commitment to a principled ethic include "It is important to fulfill one's obligations at all times, even when nobody will know if one doesn't" and "One's principles should not be compromised regardless of the possible gain." In contrast, Integrity Scale items representing commitment to an ethic of expediency include "If done for the right reasons, even lying and cheating are ok" and "Regardless of concerns about principles, in today's world you have to be practical, adapt to opportunities, and do what is most advantageous to you." Low scores on the Integrity Scale are hypothesized to represent a peripheral and unimportant moral identity, that is, strong commitment to expediency. High scores on the Integrity Scale are hypothesized to represent a central and important moral identity, that is, strong commitment to principled ideals.

The Integrity Scale is a reliable instrument that demonstrated good construct validity in a nomological net (Schlenker, 2006). Recall that the fundamental characteristic of a central moral identity seems to be commitment to a principled ethic (Walker, 2004; Walker & Pitts, 1998; see also Schlenker, 2006). In line with this prediction, Schlenker (2006) asked college students to complete the Integrity Scale and a battery of self-report surveys hypothesized to negatively relate to commitment to a principled ethic.

As predicted (Schlenker, 2006), scores on the Integrity Scale demonstrated a moderate negative correlation ( $r = -.62$ , all  $ps < .05$ ) with scores on the Morally Debatable Behaviors Scale (Harding & Phillips, 1986; as cited in Braithwaite & Scott, 1991), which measures the extent that duplicitous behaviors such as tax evasion and infidelity are regarded as justifiable actions. Scores on the Integrity Scale also showed a moderate negative correlation ( $r = -.51$ ) to scores on the Moral Disengagement Scale (Bandura, Barbaranelli, Caprara, & Pastorelli, 1996), which measures a person's tendency to neutralize personal responsibility for immoral actions. The Alienation Survey (Dean, 1961; as cited in Seeman, 1991) measures, in part, the rejection of universal prescriptions for behavior (e.g., "Everything is relative, and there just aren't any definite rules to live by") which demonstrated a mod-

erate negative correlation with scores on the Integrity Scale ( $r = -.50$ ). Finally, scores on the Integrity Scale were moderately negatively correlated ( $r = -.55$ ) with the Machiavellianism Scale (Christie & Geis, 1970), where high scores represent cynicism, guile, and a rejection of universal principles. Scores on the Integrity Scale therefore demonstrated good convergent validity with surveys that measure differences in perceived personal responsibility for moral and immoral actions and the belief in the existence of principled ideals. These data provide considerable support for the argument that Integrity Scale scores operationalize the relative centrality of the moral identity.

## STUDY HYPOTHESES

In the present investigation, college students completed the Integrity Scale during a pretest. Students who scored in the lower tercile of the Integrity Scale were designated as members of the expedient group, and students who scored in the upper tercile were assigned to the principled group. Weeks later, students arrived to a psychology lab and completed the Antisocial Behavior Scale (Schlenker, 2006), which measured their recall of a variety of unethical behaviors over the prior 5 years. Replicating prior research (Schlenker, 2006), the first moral identity hypothesis predicted:

H1: Significantly fewer students in the principled group will recall engaging in academic cheating relative to students in the expedient group.

Previous research found that academic cheating was positively correlated with other forms of unethical behavior (Blankenship & Whitley, 2000; Schlenker, 2006). Moral identity theory predicted that a student with a peripheral moral identity would report engaging in a general action pattern of unethical action, with academic dishonesty serving as a specific case. This prediction led to the articulation of the second moral identity hypothesis:

H2: Compared to students in the expedient group, significantly fewer students in the principled group will recall engaging in a variety of unethical behaviors, such as lying and fraud.

Turning to differences in sensitivity to social evaluation, the opening quote of this article foreshadowed articulation of the third study hypothesis, the social anxiety hypothesis of academic cheating:

H3: Academic cheating will be positively correlated with symptoms of social anxiety.

To expand the prediction articulated in the third study hypothesis, do differences in social anxiety predict other forms of unethical behavior, such as lying and fraud? Prior research demonstrated that college students high in sensitivity to social evaluation were willing to cheat and lie in the lab to avoid the appearance of failure (e.g., Berger & Levin, 1977; Millham, 1974; Schlenker, 2006). Based on this indirect evidence, it was tentatively predicted that the social anxiety hypothesis would generalize to a variety of unethical actions.

H4: Symptoms of social anxiety will be positively correlated with a variety of unethical acts such as lying and fraud.

## METHOD

### Participants

Seventy undergraduate college students (30 women, 40 men) enrolled in introductory psychology courses at a large, public, southeastern university participated in return for credits toward a course requirement. Students were in late adolescence ( $M = 18.57$  years,  $SD = .90$ ) and predominantly identified with a European American ethnic/racial identity (72%), followed by Latino/Latina (13%), African American (11%), or Other category (4%).

### Procedure

Introductory psychology students completed the Integrity Scale (Schlenker, 2006) in a pretesting session the 1st week of classes in August 2004. Based on the calculated sum scores on the Integrity Scale, students in the lower tercile (expedient students) and students in the upper tercile (principled students) were recruited by telephone to participate. Weeks later, students arrived individually to a psychological lab. After signing an informed consent form, students completed the packet of test measures, received information on the purpose of the study, and exited the study.

### Materials

Students filled out three surveys, including the Integrity Scale (Schlenker, 2006), a symptom checklist of Social Phobia (Psychiatric Diagnostic Screening Questionnaire; Zimmerman, 2002), and the Antisocial Behavior Scale (Schlenker, 2006). These measures are described in detail next.

*The Integrity Scale.* The 18-item Integrity Scale measures differences in commitment to a principled ethic of justice, fairness, and honesty. High scores rep-

resent strong endorsement of a principled ethics, whereas low scores represent strong endorsement of an ethic of expediency. In a series of five validation studies, the Integrity Scale demonstrated good reliability (median  $\alpha = .86$ ; 2-week test–retest correlation = .82) and construct validity in a nomological net (Schlenker, 2006). The Integrity Scale also demonstrated predictive validity in an experiment in which students had to lie on an intelligence test to avoid the appearance of failure. Integrity Scale items are measured on a 5-point agree–disagree scale and summed for a total score (range = 18 [*extremely expedient*] to 90 [*extremely principled*]).

**Social Phobia Symptom Checklist.** Social anxiety represents feelings of aversive tension that results from worry over real or imagined audience evaluations (Leary & Kowalski, 1995). Differences in social anxiety were measured with the Social Phobia subscale of the Psychiatric Diagnostic Screening Questionnaire (Zimmerman, 2002), a self-report symptom checklist of emotional and behavioral problems defined by the *Diagnostic and Statistical Manual of Mental Disorders* (4th ed.; American Psychiatric Association, 1994). The Social Phobia subscale is highly reliable (median  $\alpha = .90$ ; median test–retest  $\kappa = .95$ ) and demonstrated good construct validity in a series of validation studies (Zimmerman, 2002).

The Social Phobia subscale contains 15 true–false items that ask the respondent to recall symptoms of social anxiety over the prior 6 months, including “Did you worry a lot about embarrassing yourself in front of others?” and “Were you extremely nervous in social situations?” Eight items measure situation-specific forms of social worry, including “public speaking ... eating in front of other people ... using public restrooms ... writing in front of others ... saying something stupid when you were with a group of people ... asking a question when in a group of people ... [in] business meetings ... and parties or other social gatherings” (Zimmerman, 2002, p. 6). Social anxiety scores were calculated by summing all true responses (range = 0 [*low social anxiety*] to 15 [*high social anxiety*]). The Social Phobia subscale also includes a cutoff score of four symptoms. Respondents who endorse four or more symptoms are deemed to be at significant risk for a diagnosis of social phobia.

**Antisocial Behavior Scale.** According to Schlenker (2006), the Antisocial Behavior Scale contains five reliable subscales of antisocial behavior, including Lying (14 items;  $\alpha = .92$ ), Stealing (15 items;  $\alpha = .84$ ), Academic Cheating (4 items;  $\alpha = .69$ ), Broken Promises (4 items;  $\alpha = .77$ ), Aggression (8 items;  $\alpha = .80$ ), and one item measuring Infidelity (i.e., “I was unfaithful to a romantic partner”). The Academic Cheating subscale measures personal definitions of cheating. The majority of students in the study sample were in their first week of college; the present investigation therefore examined two of four items on the Academic Cheating scale, including “Cheating on an exam in high school” and

“Cheating on a paper in high school.” Students estimated the frequency of committing unethical behaviors for the prior 5 years on 9-point scales: 0 (*never*), 1 (*once or twice*), 2 (*about once a year*), 3 (*a few times a year*), 4 (*nearly every month*), 5 (*nearly every week*), 6 (*several times a week*), 7 (*nearly every day*), and 8 (*several times a day*).

## RESULTS

### Prevalence of Antisocial Behavior

Seventy college students estimated how often they engaged in various antisocial behaviors in the prior 5 years. Descriptive statistics of the Antisocial Behavior Scale appear in Table 1. The % Yes column in Table 2 reports the proportion of students who indicated a frequency of at least “once or twice” for a behavior on the Antisocial Behavior Scale, such as “unfaithful to a romantic partner” or “cheated on a high school exam.” Replicating prior research on the ubiquity of deception in daily life (e.g., DePaulo, 2004), the most common forms of antisocial behavior were lying (99%) and broken promises (90%).

Acts of verbal and physical aggression (96%) were also common behaviors in this sample. Replicating prior research on academic dishonesty (e.g., McCabe, Trevino, & Butterfield, 2001), 73% of the college sample ( $n = 51$ ) admitted to cheating at least once on their high school work. A majority of students also reported cheating on a romantic partner (69%), using alcohol and other drugs (64%), and stealing (59%); one in three students recalled at least one instance of fraud (30%).

TABLE 1  
Descriptive Statistics of the Antisocial Behavior Scale

<i>Antisocial Behavior</i>	<i>% Yes</i>	<i>No. of Items</i>	<i>Reliability</i>	<i>M<sup>a</sup></i>	<i>SD</i>	<i>Range</i>
Lying	99	14	.92	1.84	1.10	0.00–4.93
Aggression	96	8	.76	1.01	0.69	0.00–3.13
Broken Promises	90	4	.77	1.14	0.95	0.00–4.25
Academic Dishonesty	73	2	.70	1.30	1.34	0.00–5.00
Infidelity	69	1	—	0.49	1.13	0.00–8.00
Alcohol & Drugs	64	3	.67	1.00	1.21	0.00–5.67
Stealing	59	15	.86	0.27	0.40	0.00–2.33
Fraud	30	2	.85	0.29	0.61	0.00–3.00

*Note.*  $N = 70$ .

<sup>a</sup>Students estimated how often they engaged in antisocial behavior during the previous 5 years on 9-point scales, ranging 0 (*never*), 1 (*once or twice*), 2 (*about once a year*), 3 (*a few times a year*), 4 (*nearly every month*), 5 (*nearly every week*), 6 (*several times a week*), 7 (*nearly every day*), and 8 (*several times a day*).

TABLE 2  
Bivariate Relationships Among Antisocial Behaviors

<i>Antisocial Behavior</i>	<i>Academic</i>		<i>Drugs</i>	<i>Broken</i>			<i>Lying</i>
	<i>Dishonesty</i>	<i>Aggression</i>		<i>Promises</i>	<i>Fraud</i>	<i>Infidelity</i>	
Aggression	.40**	—					
Drugs	.38**	.19	—				
Broken Promises	.46**	.55**	.41**	—			
Fraud	.41**	.46**	.14	.50**	—		
Infidelity	.36**	.12	.38**	.45**	.12	—	
Lying	.58**	.54**	.37**	.65**	.53**	.43**	—
Stealing	.46**	.40**	.31**	.67**	.71**	.18	.58**

Note.  $N = 70$ .

\*\* $p < .01$ .

The data illustrated in Table 2 replicate prior research demonstrating a positive association among academic cheating and other forms of antisocial action (Blankenship & Whitley, 2000; Schlenker, 2006). Specifically, reports of academic dishonesty were significantly positively related with all other antisocial behaviors measured in the study, including lying ( $r = .58, p < .001$ ), broken promises ( $r = .52, p < .001$ ), fraud ( $r = .46, p < .001$ ), stealing ( $r = .46, p < .001$ ), infidelity ( $r = .41, p < .001$ ), aggression ( $r = .40, p = .001$ ), and the use of illegal drugs ( $r = .38, p = .001$ ).

### Academic Dishonesty and the Moral Identity

The previous data illustrated that academic cheating is a relatively common unethical behavior among college students, akin to lying and breaking promises. The first moral identity hypothesis of academic dishonesty predicted that a significantly higher proportion of students assigned to the expedient group would report cheating in high school relative to students assigned to the principled group. The first moral identity hypothesis received moderate statistical support, as 91% of students in the expedient group ( $n = 30$ ) reported cheating at least "once or twice" in high school, relative to 57% of students in the principled group ( $n = 21$ ) admitting to cheating,  $\chi^2(1, N = 70) = 10.29, p < .001$ . This finding represented a moderate negative relationship between group membership and academic cheating ( $\phi = -.38, p = .001$ ;  $\phi^2 = .14$ ). Table 3 provides group comparisons (expedient, principled) and effect sizes for all of the dichotomous measurements of antisocial behavior included in the study.

On average, students in the expedient group recalled significantly more academic cheating in high school ( $M = 1.42, SD = 1.50$ ) relative to students in the principled group ( $M = .43, SD = .87$ ). This mean group difference represented a large effect in support of the moral identity hypothesis of academic dishonesty,  $t(68) = 4.33, p < .001$ , Cohen's  $d = 1.03$ . Specifically, students in the expedient

TABLE 3  
Prevalence (%) of Antisocial Behaviors

<i>Antisocial Behavior</i>	<i>Expedient<sup>a</sup></i>	<i>Principled<sup>b</sup></i>	$\chi^2(1, N = 70)$	$\phi$	$\phi^2$
Academic Dishonesty	91	59	10.29**	-.38	.14
Infidelity	49	16	8.43**	-.35	.12
Stealing	76	43	7.60**	-.33	.11
Fraud	46	16	7.10**	-.32	.10
Alcohol & Drugs	79	51	5.72*	-.29	.08
Broken Promises	97	84	3.37 <sup>†</sup>	-.22	.05
Aggression	100	92	2.80		
Lying	100	97	2.00		

*Note.* The first and second columns of data represent the percentage (%) of students who reported at least one instance of an antisocial behavior in the previous 5 years on the Antisocial Behavior Scale (Schlenker, 2006).

<sup>a</sup> $n = 33$ . <sup>b</sup> $n = 37$ .

<sup>†</sup> $p < .07$ . \* $p < .05$ . \*\* $p < .01$ .

group recalled significantly more cheating on high school exams ( $M = 2.48$ ,  $SD = 1.77$ ) relative to principled group students ( $M = 1.00$ ,  $SD = 1.35$ ),  $t(68) = 3.97$ ,  $p < .001$ , Cohen's  $d = .67$ . Expedient students also reported more cheating on papers in high school ( $M = 1.42$ ,  $SD = 1.50$ ) relative to principled students ( $M = .43$ ,  $SD = .87$ ),  $t(68) = 3.43$ ,  $p = .001$ , Cohen's  $d = .81$ . The preceding results suggest that Integrity Scale scores were excellent predictors of self-reported cheating in high school—treated either as a dichotomous variable (moderate effect) or as a continuous variable (large effect). In short, the first moral identity hypothesis of academic cheating received considerable empirical support in this study sample.

### Antisocial Behavior and the Moral Identity

The second moral identity hypothesis predicted that, compared to students in the expedient group, students in the principled group would recall significantly fewer instances of all categories of unethical behavior measured by the Antisocial Behavior Scale, including lying, aggression, stealing, and infidelity (Schlenker, 2006). The second moral identity hypothesis was supported for the majority, but not all, dichotomous measurements of antisocial behavior. Specifically, significant group differences were found on five of eight categories of antisocial behavior, including academic cheating (reported above), infidelity, fraud, stealing, and the use of illegal drugs, and a statistical trend was found for group differences on broken promises (refer to Table 3).

About half of the students in the expedient group (49%) recalled cheating on a romantic partner at least once or twice in the last 5 years compared to about one in eight students in the principled group (16%),  $\chi^2(1, N = 70) = 8.43$ ,  $p < .001$ . A

greater proportion of students in the expedient group (46%) recalled one or more instances of fraud compared to students in the principled group (16%),  $\chi^2(1, N = 70) = 7.10, p < .001$ . Stealing was a more common antisocial behavior in both groups, although again a greater proportion of students in the expedient group recalled stealing (73%) compared to students in the principled group (43%),  $\chi^2(1, N = 70) = 7.60, p < .001$ . More than three fourths of the students in the expedient group (79%) recalled using alcohol and drugs at least once or twice compared to half of the students in the principled group (51%),  $\chi^2(1, N = 70) = 5.72, p = .03$ . Finally, a statistical trend revealed a small difference in the proportion of expedient students who had broken a promise to someone (97%) compared to students in the principled group (84%),  $\chi^2(1, N = 70) = 3.37, p = .07$ .

Although it is reasonable to treat students' reported antisocial behavior as a dichotomous variable, the Antisocial Behavior Scale measures antisocial action on a continuous scale. To further explore the second moral identity hypothesis, independent-sample *t* tests were conducted on each of the antisocial behavior variables with group membership (expedient = -1, principled = 1) coded as the independent variable. The results of the multiple *t*-test comparisons are provided in Table 4 and illustrated in Figure 1. Relative to students in the principled group, students in the expedient group recalled significantly more instances of antisocial behavior in all eight categories (all *t*s  $\geq 2.00$ , all *p*s  $\leq .05$ ). These data provided considerable support for the second moral identity hypothesis of unethical behavior.

TABLE 4  
Group Comparisons on Antisocial Behavior Categories

Antisocial Behavior	Group Average <sup>a</sup>		<i>t</i> (68)	<i>ES</i> <sup>b</sup>
	Expedient	Principled		
Academic Dishonesty	1.95 (1.38)	0.71 (1.00)	4.33*	1.03
Exam Cheating	2.48 (1.77)	1.00 (1.35)	3.97**	.67
Paper Cheating	1.42 (1.50)	0.43 (0.87)	3.43**	.81
Infidelity	0.85 (1.52)	0.16 (0.37)	2.66**	.62
Stealing	0.43 (0.49)	0.13 (0.22)	3.36**	.77
Fraud	0.50 (0.79)	0.11 (0.29)	2.81**	.66
Alcohol & Drugs	1.47 (1.43)	0.57 (0.77)	3.35**	.78
Broken Promises	1.48 (1.06)	0.82 (0.71)	3.09**	.73
Aggression	1.19 (0.74)	0.86 (0.61)	2.00*	.49
Lying	2.47 (1.09)	1.29 (0.75)	5.31**	1.26

Note. *N* = 70. Standard deviations appear in parentheses.

<sup>a</sup>Estimates were based on the following 9-point scale: 0 (*never*), 1 (*once or twice*), 2 (*about once a year*), 3 (*a few times a year*), 4 (*nearly every month*), 5 (*nearly every week*), 6 (*several times a week*), 7 (*nearly every day*), and 8 (*several times a day*). <sup>b</sup>Effect sizes represent Cohen's *d*, where values less than .2 are considered small, values between .2 and .8 are considered moderate, and values above .8 are considered large (Rosenthal & Rosnow, 1991).

\**p* = .05. \*\**p*  $\leq$  .01.

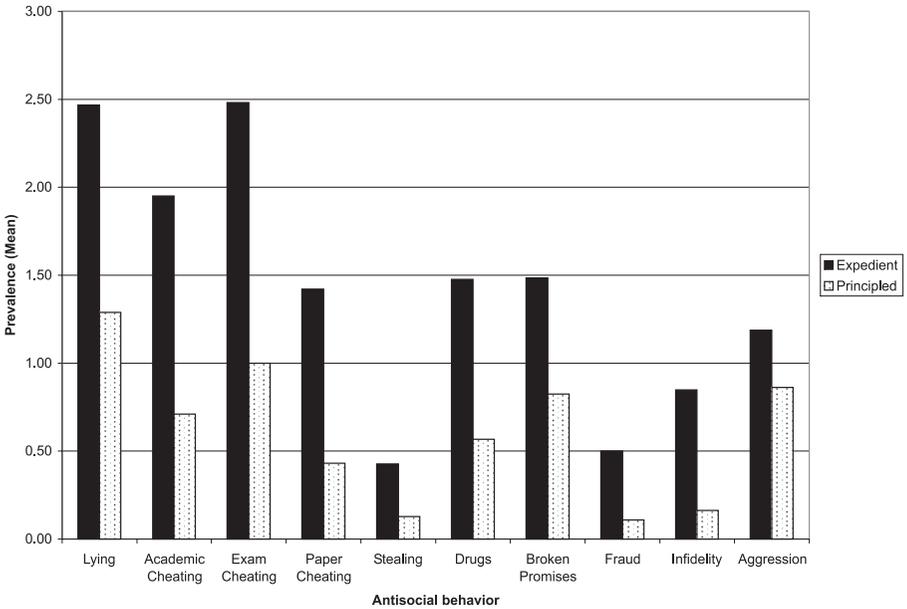


FIGURE 1 Group comparisons across categories of antisocial behavior. *Note.* All group differences are significant (all  $t_s \geq 2.00$ , all  $p_s \leq .05$ ) and presented on the x-axis from left to right in descending order of magnitude. The y-axis represents the average number of reported antisocial behaviors in the previous 5 years, where 0 = *never*, 1 = *once or twice*, 2 = *about once a year*, and 3 = *a few times a year*.

Of note, the significant correlations reported in Table 2 suggest that the multiple chi-square analyses (Table 3) and multiple *t*-tests comparisons (Table 4) were subject to an inflated Type I error rate. To curtail this possibility, a stepwise (backward) logistic regression was conducted with the eight antisocial behavior categories entered as continuous predictor variables and group membership entered as the dichotomous criterion variable (expedient = -1, principled = 1). The backward logistic regression returned two significant predictors of group membership, Fraud ( $\beta = -1.64, p = .05$ ) and Infidelity ( $\beta = -.94, p = .05$ ). Thus, a conservative statistical procedure indicated that, relative to students in the expedient group, students in the principled group were significantly less likely to recall engaging in fraud and infidelity in the previous 5 years. These data further supported the second moral identity hypothesis of unethical behavior.

## SOCIAL ANXIETY AND ACADEMIC DISHONESTY

Consistent with the opening quote of this article, the first social anxiety hypothesis of academic dishonesty predicted that self-reported cheating is positively corre-

TABLE 5  
Correlations of Antisocial Behaviors to  
Symptoms of Social Anxiety

<i>Antisocial Behavior</i>	<i>Social Anxiety</i>	<i>ES</i>
Drugs	.34**	.12
Lying	.28*	.08
Aggression	.26*	.07
Academic Dishonesty	.25*	.06
Infidelity	.23*	.05
Broken Promises	.16	
Fraud	.11	
Stealing	.07	

*Note.*  $N = 70$ .

\* $p \leq .05$ . \*\* $p < .01$ .

lated with symptoms of social anxiety. The second social anxiety hypothesis expanded the prediction to all eight categories of antisocial action measured in the study. The measurement of social anxiety (Zimmerman, 2002) demonstrated good reliability in this study sample ( $\alpha = .89$ ). Table 5 illustrates the weak support for the social anxiety hypothesis of academic dishonesty ( $r = .25, p = .04$ ). Symptoms of social anxiety were also weakly related to illegal drug use ( $r = .34, p < .01$ ), lying ( $r = .28, p = .02$ ), aggression ( $r = .26, p = .03$ ), and infidelity ( $r = .23, p = .05$ ). Differences in social anxiety were unrelated to broken promises ( $r = .16, p = .18$ ), fraud ( $r = .11, p = .38$ ), and stealing ( $r = .07, p = .58$ ).

Of note, students in the expedient group reported on average about four symptoms of social phobia ( $M = 4.53, SD = 4.07$ ) compared to about one symptom of social phobia among students in the principled group ( $M = 1.59, SD = 2.54$ ), a statistically significant difference,  $t(68) = 3.66, p < .001$ . In fact, the group average for expedient students ( $M = 4.53$ ) exceeded the cutoff score of four symptoms for the Psychiatric Diagnostic Screening Questionnaire (Zimmerman, 2002). In other words, if students in the expedient group completed the Psychiatric Diagnostic Screening Questionnaire at a mental health center, the counselor who scored the survey would have followed up with additional questions to rule out the possibility that these students were suffering from social phobia (Zimmerman, 2002).

## DISCUSSION

The preceding results provide considerable support for the moral identity hypothesis of academic cheating. The social anxiety hypothesis of academic dishonesty also received weak statistical support. The remaining sections of this article ad-

dress each of the study hypotheses in greater detail and conclude with implications for intervention strategies.

### THE MORAL IDENTITY HYPOTHESIS OF ACADEMIC DISHONESTY

The thought/action problem of academic dishonesty seems to be explained, in part, by measuring the relative centrality of a college student's moral identity. It was argued that the Integrity Scale measures the relative centrality of the moral identity by measuring preexisting differences in endorsed ethical ideologies. In support of moral identity theory (see Lapsley & Narvaez, 2004), the results showed that students in the principled group reported significantly fewer instances of a wide range of unethical behaviors, in particular academic dishonesty, relative to students in the expedient group.

Thus, this study's major implication is that the relative centrality of a college student's moral identity seems to affect his or her willingness to engage in academic dishonesty. In other words, the data suggest that a central and important internal moral audience (i.e., superego, conscience) prohibits a college student from engaging in academic dishonesty, which presumably would lead to aversive feelings of self-betrayal such as guilt and shame (e.g., Tangney & Dearing, 2002). Given that the dependent variable in this study was a self-report measure of academic dishonesty, additional research is necessary to determine how robust the moral identity hypothesis of academic cheating is among college students adjudicated for academic cheating.

#### The Social Anxiety Hypothesis of Academic Dishonesty

The results demonstrated a weak positive correlation between Academic Dishonesty and symptoms of social anxiety (i.e., social phobia). Of note, students in the expedient group reported four times the symptoms of social phobia relative to students in the principled group. On average, students in the expedient group were deemed to be at significant risk for a diagnosis of social phobia (Zimmerman, 2002). Based on these correlational data, it is interesting to speculate about the possible connections between the endorsement of an expedient ideology and concerns over social rejection. For some expedient students, academic dishonesty may well be another means of avoiding potential social rejection, which is part of a general action pattern of unethical behavior employed to avoid disapproval. The statistical links were not strong but do suggest avenues for future research on the causes of unethical behavior. In addition, other researchers have demonstrated positive links between academic cheating and subclinical levels of psychopathy (i.e., Machiavellianism; Nathanson, Paulhus, & Williams, 2006), suggesting that aca-

dem cheating is either a precursor or covariate of a variety of emotional and behavioral problems.

### Study Limitations

As is common in research on academic dishonesty, it is important to remember when interpreting the preceding results that the key dependent measure was recall of academic cheating, not actual incidences of academic cheating. Students may have problems remembering all of their instances of academic cheating. In addition, cheating was not explicitly defined in this study, and so students probably vary in what they consider to be "cheating." For example, an expedient student may have an entirely different definition of cheating relative to a student who endorses a principled ethic. Another line of research would include a sample of students who were actually adjudicated for academic dishonesty.

### Study Implications

The study findings suggest practical intervention strategies to curtail academic dishonesty among American college students. First, the data strongly supported the moral identity hypothesis, suggesting that differences in students' preexisting ethical ideologies predict engagement in academic cheating and a wide variety of unethical actions. Thus, in an ideal situation, every American college student would enroll in a moral philosophy course that clarified the various ethical beliefs systems and how those systems seem to translate moral beliefs into ethical and unethical actions.

A key factor that determines the relative centrality of the moral identity is the extent to which a person perceives personal responsibility for moral and immoral action (see Lapsley & Narvaez, 2004). Thus, the present investigation strongly supports the interpretation that any intervention for academic cheating must address neutralization tactics that undermine personal responsibility for academic dishonesty (McCabe, 1992). If college professors spent just 5 or 10 min on the first day of lecture discussing personal responsibility for academic dishonesty, students would have an opportunity to reflect on their own ethical belief system and their responsibilities as members of the academy.

Second, although the statistical links to academic dishonesty were weak, the data provided strong support for the contention that college students who are strongly committed to an expedient ethic are at a significant risk for a diagnosis of social anxiety. This finding does not, however, imply the inverse association, which is that students who suffer from social anxiety are necessarily expedient. The causal connections between ethical beliefs and sensitivity to social evaluation are unclear. It may be that some socially anxious students find it difficult to study or take exams because part of their attentional capacity is focused on audience

evaluations and not the task at hand (e.g., Leary & Kowalski, 1995). In turn, these students endorse an expedient ideology in a post hoc fashion to justify their unethical actions (reminiscent of the opening quote in this article).

Conversely, it may be that some expedient students who cheat develop concerns over social rejection out of an aversion to being caught and sent before an honor court. Most likely, the relationship is reciprocal, whereby an expedient student feels he or she is caught in a Catch-22 situation of cheating to avoid disapproval and then worrying about getting caught. This worry further undermines his or her ability to study for exams, leading to further performance anxieties and increasing the temptations to cheat to compensate. Therefore, university counseling centers and honor courts should work together to ensure that students who have been adjudicated for academic dishonesty have the opportunity to be screened for various emotional and behavioral problems.

Finally, one method to curtail cheating among socially anxious students would actually tap into their social concerns. Just as juvenile delinquents are often taken to a penitentiary to “discuss” their possible futures in jail with inmates, honor courts could provide adjudicated students with the option of visiting freshmen orientations and classrooms to discuss why they think they cheated and the implications of cheating behavior on their professional and social relationships. Students who worry about social evaluations would probably sit up and take notice of these face-to-face warnings.

## ACKNOWLEDGMENTS

The opinions expressed in this article do not necessarily reflect the views of the Center for Academic Integrity or the John Templeton Foundation. I thank Barry R. Schlenker for sharing the Integrity Scale and our many enriching discussions on the meaning of integrity. I also thank Diane Waryold, Elizabeth Kiss, Don McCabe, the Center for Academic Integrity, and the John Templeton Foundation for their encouragement and support.

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