

International Journal for the Scholarship of Teaching and Learning

Volume 9 Number 1 Article 9

January 2015

Choosing Not to Cheat: A Framework to Assess Students' Rationales for Abiding by Academic Integrity Policies

Kenneth H. Kolb Furman University, ken.kolb@furman.edu

Kyle C. Longest Furman University, kyle.longest@furman.edu

Alexa J. Singer Florida State University, alexa.singer1@gmail.com

Recommended Citation

Kolb, Kenneth H.; Longest, Kyle C.; and Singer, Alexa J. (2015) "Choosing Not to Cheat: A Framework to Assess Students' Rationales for Abiding by Academic Integrity Policies," *International Journal for the Scholarship of Teaching and Learning*: Vol. 9: No. 1, Article 9. Available at: https://doi.org/10.20429/ijsotl.2015.090109

Choosing Not to Cheat: A Framework to Assess Students' Rationales for Abiding by Academic Integrity Policies

Abstract

Writing intensive first-year seminars are well situated within the curriculum to teach about issues like cheating and plagiarism. Although most research on academic integrity focuses on how—and how much—students cheat, we take a different approach. We assess whether participation in writing intensive first-year seminars produces measurable changes in students' rationales for choosing *not* to cheat. Relying upon data collected via pre and post-test in-depth interviews, we propose a framework to measure these changes that is grounded in students' accounts of how they negotiated real-life opportunities to cheat on campus. In general, we find that writing intensive first-year seminars produce no positive qualitative changes in students' rationales for choosing not to cheat. In the conclusion, we offer a new perspective on the possible consequences of creating "cheat proof" tests and assignments on students' ethical development.

Keywords

academic integrity, cheating, assessment, first-year seminars

Creative Commons License

Creative

This work is licensed under a Creative Commons Attribution-Noncommercial-No Derivative Works 4.0 Attribution-

Noncommercial-

No

Cover Page Footnote

*Correspondence concerning this article should be addressed to Kenneth H. Kolb, Department of Sociology, Furman University, Greenville SC 29613. Contact: ken.kolb@furman.edu

License

Colleges and universities expend considerable resources to stop students from cheating. Despite these efforts, a review of the scholarship on cheating has shown that rates have increased in recent decades (McCabe & Trevino, 1997; McCabe, Trevino, & Butterfield, 1999; McCabe, Treviño, & Butterfield, 2001). In response to this trend, numerous studies have examined students' motivations to cheat (Jordan, 2001). This line of research ranges from macro social factors that make some forms of cheating more likely (Vowell & Chen, 2004; Kobayashi & Fukishima, 2012) to micro contextual effects—like the impact that "bad apples" have on their peers (Gino, Ayal, & Ariely, 2009). Although this line of inquiry sheds considerable light on how, when, where, and why students cheat—and how to stop them—our paper analyzes cheating from a different angle. We focus on the reasons why students choose *not* to cheat.

We pursue this line of inquiry under the assumption that college level administrators and instructors have higher aspirations than simply lowering cheating rates; they also want students to not cheat for the right reasons. In other words, institutions of higher education want to instill in students the belief that academic honesty is the ethically correct choice—not merely a pragmatic strategy to avoid punishment.

Efforts to develop students' moral sense of right and wrong in academic settings most often take the form of honor codes and integrity pledges (for more, see Vandehey, Diekhoff, & LaBeff, 2007; McCabe et al., 1999). More recently, a different type of program has been designed to assist students' ethical development: the writing intensive first-year seminar. In this paper, we propose a new framework to assess whether participation in these seminars leads to changes in students' rationales for not cheating. We argue that our proposed framework contributes to the prevailing scholarship on why students choose not to cheat (Miller, Shoptaugh, & Woolridge, 2011) because it is grounded in real-life, recent examples provided by students themselves.

Academic Integrity and First-Year Seminars

Nationwide, colleges and universities have implemented firstyear seminars as a means to help students transition from high school to their new intellectual community. The success of first-year seminars in regard to retention, graduation rates, grade point averages, and overall satisfaction have been well documented (Starke, Harth, & Sirianni, 2001; Pascarella & Terenzini, 2005). Among four-year institutions, 21.5% of these seminars function to teach "writing skills" to students (Padgett & Keup, 2011, 25) as the most important course objective—often serving as a replacement for traditional "English 101" style composition courses. These writing intensive first-year seminars typically feature a process-oriented approach that requires students to submit multiple drafts of papers, attend teacher-student "conferences," and participate in peer-to-peer "draft workshops" (Brent, 2005; Gottschalk, 2013).

Writing intensive first-year seminars are well situated in college curriculums to cover issues like academic integrity because they occur early in students career's (Connely, 2009) and offer relatively more instruction on citation methods and plagiarism than other courses. Although some seminars require students to read philosophical texts on ethics (Lau, 2004), most lessons about cheating and academic honesty are folded into information fluency modules that teach students how to find and cite the works of others (Bombaro, 2007).

At our institution, Furman University, fostering students' academic integrity is an explicit objective of the writing intensive first-year seminar program. Although instructors are given some leeway on how and when to incorporate lessons on academic integrity into their syllabi, "education about plagiarism and other forms of academic dishonesty in accordance with university-wide policy" is one of the program's primary "general pedagogical guidelines" (Furman University, 2014). In each seminar, the appropriate use of sources and attribution at Furman University is taught by the instructor and—to a lesser extent—a research librarian assigned to each course. However, looking further into the university-wide policies, we see that reducing rates of plagiarism is not the entire goal of Furman University's policy on academic integrity. In addition, students are expected to conduct themselves with "personal honesty and responsibility...In taking tests and examinations, doing homework, laboratory work and writing papers, students are expected to perform with

honor" (Furman University, 2015). Thus, we argue that institutions like ours want students to not only abide by the rules of the institution, but to do so for honorable and virtuous reasons. Because these internal dispositions towards academic integrity are difficult to measure and assess, we have constructed our own assessment framework that is grounded in students' accounts of how they negotiated recent temptations to cheat.

METHODS

Interview design

Most studies that measure why students cheat typically use survey instruments (Fish & Hura, 2013; Genereux & McLeod, 1995; Jordan, 2001; McCabe & Trevino, 1997; McCabe et al., 1999; Roig & Casso, 2005; Thorkildsen, Golant, & Richesin, 2007) or have student participants read scenarios of tempting situations and explain how they might respond (Rettinger, Jordan, & Peschiera, 2004). These studies are useful for estimating cheating rates at any given moment and identifying specific characteristics of students who cheat frequently. However, students' rationales for *not* cheating can be even more challenging to measure. Miller et al. (2011) measured rationales for not cheating by inviting respondents to answer open-ended questions about a possible scenario described in a vignette; however, the data they collect largely captures what students might do if given an opportunity to cheat. We offer a different approach. We ask students to provide real-life, recent examples of specific instances when they perceived a plausible opportunity to cheat in one of their classes. This way, we collect a more accurate and vivid picture of their reasoning process in an actual—not hypothetical—situation.

As one part of a larger assessment project (Kolb, Longest, & Jensen, 2013; Kolb, Longest, & Barnett, 2014), interview questions spanned a variety of topics beyond scholarly ethics, including participants' writing process, disposition toward learning, and information fluency. Using a semi-structured interview guide (Lofland et al., 2006) students were pressed to clarify their statements until interviewer and interviewee came to a reasonable understanding of the underlying meaning behind

each question and response. The questions asked during their pre-test (at the beginning of the semester) and their post-test (at the end of the semester) were identical. In regard to scholarly ethics, students were asked to identify a recent instance when they were "tempted to use another person's words or ideas as their own on a graded assignment, paper, or test." If they asked for clarification, interviewees were told that these instances could include—but were not limited to—times they had been tempted to plagiarize, look at another student's test during an exam period, or complete a homework exercise by copying another student's answers. Because there is little consensus on objective criteria for all possible forms of cheating (Fish & Hura 2013; Miller et al., 2011), we asked interviewees to confirm that—had they acted upon their temptation—they believed that their instructor would have interpreted such behavior as cheating or "conscious deception" (Colnerud & Rosander, 2009, p. 506). If they could not confirm this, we asked them to provide a different example. While the questions stayed the same across pre and post-test interviews, in their second interview students were asked to describe their most recent temptation to cheat (that is, one that took place after their first interview). By comparing participants' rationales across these two data points, we can identify changes in their ethical stance over time.

The purpose of this approach to interviewing was to get students to give detailed answers instead of "generalized accounts" (Weiss, 1994, p. 72). Although hypothetical scenarios or generalized explanations may elicit students' views or perceptions, these accounts may not reflect students' actual practices. During our interviews, if participants had trouble providing a specific, personal example, we prompted them with ample follow-up questions until they were able to provide detailed accounts of times when they were faced with an opportunity—even if perceived to be too risky—to cheat. Given enough time, all interviewees were able to cite at least one example.

Sample and Setting

Over the course of two years (spring 2009 to fall 2010), at least eight students were interviewed per semester for four semesters (n = 34). After receiving approval from the Institutional Review Board at our institution, a list of potential participants was derived from a random sample of students enrolled in these courses. Although the interviewer (first author) teaches firstyear writing seminars at our institution, none of the participants were enrolled in his classes. An honorarium (\$10 per interview) was offered and slots were filled on a first-come, first-serve basis, potentially biasing the sample toward more eager, higher achieving students. Latinos, African Americans, and men were oversampled to compensate for their underrepresentation on campus and to ensure their participation. The sample is evenly split between students who took their course in either the fall or the spring semester. Each participant was interviewed twice (pre-test and post-test)—yielding a total of 68 interviews and nearly 50 hours of audio data.

Implemented in 2008, Furman University's writing intensive first-year seminar program was designed to replace traditional introductory composition courses for first-year students. The theme of each course varied across the disciplines, but the program dictated a shared general structure. Each course was capped at 12 students who were required to produce between 16 and 20 pages of finished writing. Students also had individual conferences with their instructors, in-class draft workshops, and an information fluency session taught by a research librarian assigned to assist each seminar throughout the semester. As stated above, developing students' scholarly ethics was one of the goals of the program—a topic well suited for learning modules on citation and plagiarism.

Coding and Framework Construction

Interviews were digitally recorded and transcribed. A qualitative analysis software program, Atlas.ti, was used to code the data along a composite framework of seven categories of rationales given by students about why they do or do not cheat (outlined in detail below). These categories were identified through an inductive, grounded theory process (Charmaz, 2006). First, we

looked for patterns within students' self-reported accounts. Then, we looked to the existing literature on the most common reasons why students choose not to cheat. For example, Miller et al. (2011) identify "avoiding consequences," "personal moral standard or character," "observation it is wrong," "incompatible with individual's education goals"; while McCabe et al. (1999) focus primarily on "honor codes." By collapsing and revising these common rationales (as well as adding a few new reasons offered by the students), we developed a scale of seven categories that span the spectrum of reasons students offered when pressed to explain why they chose not to cheat. We assigned each category a score between 0 and 6 with the higher categories reflecting ethical dispositions that program administrators and instructors would most like to see in their students. The categories, in order, are as follows: (0) admitted to cheating (1) barriers to consideration, (2) limited benefits, (3) fear of consequences, (4) written policies, (5) learning goals, (6) internalized beliefs.

By collecting students' accounts about their rationales for not cheating at the beginning and end of their seminar, we can then compare their pre and post-test scores. Additionally, scores can be collapsed into dichotomous "low" (1-3) and "high" (4-6) categories in order to analyze their ethical development—or lack thereof—more broadly.

Assessment Framework

Nearly 95% of students in our sample offered accounts where they were tempted, but ultimately chose not to cheat. We do not claim that this means only 5% of students cheat. Our assessment is only designed to measure changes in students' rationales for why they choose *not* to cheat when offered an opportunity to do so. In regard to our framework, students who did admit to cheating anywhere in their account received a score of zero. Examples of cheating we gathered included students glancing at another students' work during an exam, using an authorized study aid ("spark notes") to write a paper, and using analysis from a secondary source to craft a thesis statement without attribution.

Barriers to Consideration (1)

Students reported that they chose not to cheat for a variety of reasons, the lowest ranking of which we label barriers to consideration. Students in this category do not cheat because they have a hard time imagining how they possibly could and get away with it. They operate under the assumption that their assignments and tests are effectively "cheat proof"—either in the way they are designed or how they are administered. These students often cite the vigilance of their instructors who closely proctor their exams or use plagiarism detection services like turnitin.com. One student explains how difficult it is to cheat in her chemistry class, "...you have to be seated with a space in between each person. You can't ever use your own calculator; you have to go get [the instructor's] calculator. You can't leave the room, like, so it's not really much of an opportunity for cheat or do anything like that." Thus, these students' accounts offer little evidence of ethical reflection regarding whether cheating is right or wrong. When asked for examples of times they were tempted to cheat, they have difficulty offering any because they cannot imagine how they could, or they believe that any effort to cheat would be immediately detected.

Interestingly, these students also refer to incentive mechanisms structured into assignments that remove any temptation to cheat. These activities include expository essays that discourage the use of outside evidence to support claims and research papers that reward students for citing others' work as much as possible. In one of these cases, a student was unable to think of a time she considered using another's ideas without attribution because citing sources was an easier path to earning a higher grade, "...the professor is not going to penalize you if you cite a source, so why not just cite it as someone else's one and put your own interpretation on it?" This type of assignment construction is a common way to pre-empt any thoughts of cheating. Genereux and McLeod (1995) found that students respond well to this method of cheating prevention. However, as we discuss in the conclusions and future study section, creating incentive mechanisms that ultimately "cheat proof" assignments can yield unintended consequences; namely,

it denies students the opportunity to think through ethical dilemmas they will likely have to grapple with after graduation.

Limited Benefits (2)

Students in this category weigh both the positive and negative consequences to cheating and ultimately determine that the potential reward is not enough. These students' responses imply that they would consider engaging in academic dishonesty if offered a greater payoff, but they choose not to cheat because they do not think that it is worth the risk. One student explains the thought process she went through when deciding whether or not she should cheat on a test:

And, so I was like 'Do I cheat, do I not?' And so, you're kind of sitting there—and [the instructor] is old, she has no idea... So, I'm like 'Would I kill my grade with a 70?' 'What can I do to bring it up?'... 'What would be the consequences of this?'... And, I was just like, 'It's honestly not worth doing that because I can just pull up my grade some other way'...So, I just didn't cheat.

Other times, students see limited value in cheating on the suspicion that their classmates are no more likely to have better answers. For example, if they believe the person sitting next to them during an exam is a poor student, then they surmise that stealing her/his answers would defeat the purpose of cheating. In other cases, they perceive the assignment or task at hand to be relatively unimportant—bearing little or no effect on the final calculation of their grade if they perform poorly. These kinds of calculations are common among college students. As one study showed, the greater the reward a student expects from cheating, the more likely he or she is to cheat (Whitely, 1998). In these cases, the students expect a low reward for cheating and choose to remain honest.

Fear of Consequences (3)

According to the scholarship on how to reduce cheating, the effectiveness of this rationale remains to be seen. According to Miller et al. (2011), students concerned only with punishments

or consequences are more likely to cheat. Students in this category choose not to cheat out of fear. They see the consequences of cheating to be so daunting that it is not worth the risk no matter what the rewards. They fear penalties imposed by others (failing grade, suspension, expulsion), as well as penalties imposed by themselves (guilt, shame, self-reproach). They assume that any attempt to gain unearned advantage will be detected by the instructor or their peers—and that the punishments would be swift and severe. One student expressed this type of ever-present fear during his interview,

I think I was pretty paranoid on test-taking, paperwriting; pretty much whatever. No, I didn't feel that there was any point where, like it is at all safe to cheat. It's always kind of like there's a fear that you're going to get caught if you do that.

To be clear, all accounts in our sample included some degree of fear in the decision making process. However, compared to category 2 (*limited benefits*), students in the *fear of consequences* category focus primarily on the penalties rather than any potential rewards when deciding "is it worth it?"

Written Policies (4)

Students in this category explicitly cite institutional written policies when explaining why they choose not to cheat. As one student explained,

The academic integrity clause or whatever, policy...it's a big no-no to use someone else's words or writing, you know, without using quotes or paraphrasing it into kind of your own words. So, I don't think I've ever used something without using quotes or paraphrasing.

According to McCabe and Trevino (1993), honor codes can be effective because they make it difficult for students to rationalize cheating behavior when the expectations of the university are laid out for them (see also Jordan, 2001). However, these honor

codes are only effective when they are strongly embedded within the university's culture (McCabe et al., 2001). While it is unclear how much students understand the ethical underpinnings of Furman University's academic integrity policy, their accounts indicate that they believe that policies and laws (in general) must be followed. Like students in category 2 (fear of consequences), these students know that breaking rules and policies can invoke severe penalties; however, students in category 4 choose not to cheat more out of respect to the written principles of their institution.

Learning Goals (5)

Research has shown that students who decide not to cheat as a way to accomplish their learning goals are less likely to cheat than those who fear punishments or consequences (Miller et al., 2011). Students in this category explain that they do not cheat because they want to succeed on their own merit and are striving to learn as much as can during their four years in college. One student in this category explained his decision not to cheat this way:

I want to be able to know that I earned the grade instead of like looking back and remembering, like oh well I just looked at my book, so it doesn't really count. It's not a good representation of how well I studied or how well I understand the material.

Many of these students express wanting to learn the material for use in their future courses and later in life. They frame their decisions not to cheat in relation to their personal goals and aspirations. For example, some students wish to learn a foreign language, and see cheating as counterproductive to their larger goal of eventual fluency. Others believe that the more advanced topics they aspire to study in the future will require a mastery of material taught in the present; as a result, they see cheating in introductory courses to be ultimately counterproductive if they are going to major in this subject. Unlike students in category 1 (limited benefits), these students' prioritize the future, long-term rewards of not cheating rather than base their calculations on

the immediate benefits of doing well on a particular assignments or test.

Internalized Ethical Beliefs (6)

Students in this category claim that they do not cheat because they find cheating to be immoral, unethical or simply, "not right." Sometimes, they attribute these beliefs to lessons learned from their parents or influential peers. Most commonly however, students cannot articulate exactly where their beliefs originated or precisely why they believe cheating is immoral or unethical. They simply state that cheating is "wrong." When asked to expand upon their belief, one student said, "I don't know, it's just something I've always believed in." What these students' accounts lack in regard to complexity and nuance they make up for in terms of clarity and assuredness. One student describes a scenario in which she is "completely blanking" on a test and how it would be easy for her to look to the girl next to her to help jog her memory. She stated, "...I knew I could just look over and just see the notes that she had jotted down, but I knew that's not right, so I didn't...it's not ethical." In general, they conveyed that their beliefs about cheating extend beyond their college experience and indicate a moral framework that guides all of their decision making—both inside the classroom and out.

We rank internalized beliefs highest in our framework because we believe most colleges and universities want students to translate the ethical lessons taught around narrow issues (like plagiarism) to issues bigger than just education (for a more thorough philosophical discussion of the ethics of cheating and not cheating, see Colnerud & Rosander, 2009). Citing the works of others not only acknowledges others' intellectual property, but also an understanding that others thoughts and ideas should be treated with respect and care. This is why the top three items in our framework (written policies, learning goals, internalized beliefs) can also be aggregated into a "high" category that is qualitatively distinct from the "low" rationales for not cheating (barriers to consideration, limited benefits, fear). In the lower categories, students signify a pre-occupation with themselves (i.e. will their actions ultimately benefit or harm them?), whereas the higher categories indicate a more outward view by

conveying respect for the material at hand, the values of the institution, and the broader moral community.

Findings

To score each interviewee's account, we stripped them of all identifying information and put them in random order so that the three authors would not know whether two accounts were from the same students or whether the account was recorded during a pre-test or a post-test interview. The first round of coding yielded moderately good inter-rater reliability. In 44% of the cases all three raters assigned the exact same score. In 79% of the remaining cases (44% overall) at least two of the three raters assigned the exact same scores, meaning that there were only 8 cases (12%) in which all three raters disagreed. The overall kappa was .50, meaning that the three raters agreed 50% more frequently than would have been expected by pure chance (given the distribution of the ratings). This kappa score is conservative, however, because it treats all disagreements equally (e.g., a difference between a score of 1 and 2 is the same as between a 1 and 5). When we weight the score to adjust for near versus far misses it is above 80%, showing substantial agreement. To finalize the scoring of each account, we first left in place the scores on 30 of the accounts where all three authors assigned the exact same score. We then finalized the score for an additional 30 accounts where two out of three of the authors assigned identical scores—letting the majority determine the score. For the final 8 accounts where there was no agreement, the first and second author met and read the accounts together, discussing each one until we agreed upon a final score. As we will show in the conclusion, the difficulty associated with assigning scores to students' accounts is not merely a problem of operationalization. Students often give multiple (and sometimes contradictory) explanations for why they chose not to cheat. We will offer an example of an account that best reflects the challenges associated with measuring students' moral reasoning in the limitations section.

Changes in Students' Rationales for Not Cheating

In general, students' post-test scores dropped slightly compared to their pre-test scores in our framework. In Table 1, we found that—on average—the entire sample began their writing intensive first-year seminar with an average score of 3.5 and finish with an average score of 3.12. Women drop more (-.74) than men (who stay relatively the same), but this is likely due to the fact that women start the semester much higher to begin with (3.74 to 3.2). Race and ethnicity appear to have an inconsequential effect; White students drop a quarter of a point (-.25) and non-White students drop roughly a half of a point (-.57). A two-sampled t-test of means revealed that there was no statistically significant difference in the pre and post-scores, at the .05 level, for the entire sample or any sub-group. This lack of statistical significance further supports the finding that there is very minimal change in the students' beliefs about cheating across the semester.

Table 1
Average Differences in Cheating Pre-Post

		Gender		Race	
	•	Men (n=15)	Women (n=19)		,
Pre Average	3.50	3.20	3.74	3.65	3.28
Post Average	3.12	3.33	2.95	3.4	2.71
Difference in Pre-Post Average	38	.13	79	25	57

^{***}p<.001 **p<.01 *p< .05; $^{\dagger}p$ < .1. Two tailed t-tests of means.

As stated above, our six categories for not cheating can also be split into categories of "low" (barriers to consideration, limited benefits, fear of consequences) and "high" (written policies, learning goals, internalized ethical beliefs). By creating a third category to include the relatively small number of students who scored a zero (admit to cheating) we can identify the percentage of students who move up or down a category (or stay in the same one) over the course of their semester. As shown in Table 2, more students (58.8%) remained within the same category (i.e. started "low" and stayed "low) than the 17.7% who moved up a category (including those, for example, who started "low" and finished "high"). Nearly a quarter of our sample (23.5%) moved down a category.

Table 2
Distribution of Categorical Change Pre-Post ("High," "Low,"
"Admit to Cheating")

	Total Sample (n=34)	Gender		Race		
		Men (n=15)	Women (n=19)	Whites (n=20)	Racial/Ethnic Minority (n=14)	
Decreased Categories	23.5%	20.0%	26.3%	20.0%	28.8%	
Stable Category	58.8%	53.3%	63.2%	60.0%	57.1%	
Increased Category	17.7%	26.7%	10.5%	20.0%	14.3%	
Total	100%	100%	100%	100%	100%	

Note: Columns may not sum to 100 due to rounding

This downward shift in our framework is most visible in Table 3 where we see the percentage changes of response categories over the course of the semester. Whereas 23.53% of the

sample reported not cheating because it went against their internalized ethical beliefs at the beginning of the semester, this percentage drops to 8.2% by the end of the semester.

Table 3 Distribution of Cheating Categories (Percents Shown) (n = 34)

	Pre	Post	% Change
0 – Admit to Cheating	5.88	2.94	-2.94
1 – Barriers to Consideration	17.65	35.29	17.64
2 – Limited Benefits	14.71	8.82	-5.89
3 – Fear of Consequences	11.76	5.88	-5.88
4 – Written Policies	5.88	2.94	-2.94
5 – Learning Goals	20.59	35.29	14.7
6 – Internalized Beliefs	23.53	8.82	-14.71
Total	100%	100%	

Although there is a clear increase in the percentage of accounts related to students individual *learning goals* (20.59% to 35.29%) which signals a heightened awareness of the value of education for its own sake, the biggest change is found in category 1, *barriers to consideration* (17.65% to 35.29%). As a result, we see students more focused on the benefits of education, but also more students who believe their assignments and tests are structured in a way that impedes any ethical reflection on how or why not cheating is the right thing to do. We explore the implications of these findings more in the conclusion and future study section; however, first we will acknowledge limitations associated with this study.

Limitations

There are three main limitations to our study: the sample size, the inability to control for outside effects, and the reliability of our framework. First, because in-depth interviews are labor intensive, we were limited in the number of participants we could enroll in our study. We recognize that the small sample, especially when testing sub-group differences (e.g., gender and race), may impact the ability to detect statistical significance. To further empirically check this issue, we used a Fisher's exact test and still found no statistical significant difference between the pre and post-scores. Moreover, even if the differences were statistically significant the substantive change in beliefs would be extremely small.

Second, our participants are exposed to a variety of courses and experiences in addition to their first-year seminar. As Astin (1997) effectively argues, student performance does not occur in a vacuum, they arrive on campus with their own ethical beliefs and assumptions and their subsequent actions should also be interpreted in light of other ongoing environmental influences: namely, participants' general exposure to their broader collegiate experience. Because students at Furman University are required to take first-year seminars, we cannot compare the results of our sample against a control group of students at the same institution not exposed to these seminars. Although instruction on plagiarism and scholarly ethics are built into the guidelines of our first-year seminar program, they are also covered to varying degrees in other courses across the curriculum. Thus, our findings cannot definitively state what causes students to move up or down (or remain the same) in our framework is solely a product of their participation in first-year seminars.

Third, in regard to the reliability of our framework, it was difficult to isolate the most salient category of moral reasoning at play in some students' account. Although some accounts were very clear (at least two of the raters agreed on 60 out of the 68 pre and post-test rationales), others were very ambiguous. Take the following rationale for a student who chose not to cheat during an exam even though she believed she could have done so without being seen by her instructor or her peers.

I didn't do it because I just knew ... there might still be a way to determine that I had done that. And, also, guilt, I would say, really got to me. I didn't want to do anything dishonest... based on those two main things-the fear of being caught and the moralities-it just kind of stopped me from doing it.

In this account, we see two primary reasons for not cheating: fear of consequences and internalized ethical beliefs. Did the student not cheat because she feared the consequences imposed by her instructor (grade penalty) or by herself (guilt)? Perhaps she choose not to cheat because she believed dishonesty was ethically wrong? Ultimately, we assigned a score of six because we interpreted the student's account as most indicative of an internalized ethical belief that cheating was wrong—regardless of the consequences. However, we recognize that others may disagree. Luckily, during our rating process, only 8 of 68 (11.8%) accounts indicated multiple (and sometimes contradictory) rationales for not cheating. We found that the overwhelming majority of accounts (88.2%) fit nicely within one of the categories.

Conclusions and Future Study

The primary contribution of our study is the framework we constructed from both students' accounts and the broader literature on why students choose not to cheat. We believe there is evidence to show that they are not achieving their stated goals in regard to the ethical development of students, but we acknowledge that the small sample size of participants combined with variability of teaching styles among different instructors in the writing intensive first-year seminar program mean that future research is needed before a definitive judgment of their success (or failure) can be made.

Although developed within a liberal arts environment, this framework could be useful to any instructors and administrators throughout higher education (from large public universities to 2-year community colleges) who are interested in understanding the mindset and thought processes of students when tempted

with the possibility to cheat. Although we recognize that not all students' in-depth interview accounts fit neatly into our categories, this issue could be sidestepped by converting this framework into a survey instrument that forces students to commit to one type of rationale over another. Also, such an instrument could include an additional category reserved for accounts that contain multiple and conflicting rationales. So long as students are asked to ground their responses in real-life, recent examples of times when they were faced with an opportunity to cheat, we believe this line of questioning can elicit valid and reliable evidence of their thought process.

Our findings showed that writing intensive first-year seminars produce little to no qualitative improvements in how students negotiate the temptation to cheat on campus. Although the vast majority chose not to cheat (which is good), by the end of the semester roughly one-third of the respondents in our study explained that they did so because they believed cheating was too impractical or otherwise infeasible. They believed they would be immediately detected, or their assignments are structured in such a way that they were rewarded more for not cheating (i.e. adding more citations to earn more points). While we are heartened by the effectiveness of these tactics to construct barriers for student to even consider cheating, we submit that this strategy deserves further consideration.

If students spend four years immersed in a setting where their assignments, tests, and papers are effectively "cheat proof," how will they respond to temptation once they graduate? Once they leave the protected and nurturing confines of their college campuses, the labor market that awaits them presents innumerable opportunities to cheat, steal, embezzle, defraud, and worse. What ethical training has college provided students if all of the temptation and opportunity to cheat has been engineered out of their academic experience? Negotiating temptation is a skill that students need to develop as part of their undergraduate experience. Therefore, constructing the "cheat proof" classroom may—inadvertently—impede students' ethical development.

References

- Astin, A. W. (1997). What Matters in College: Four Critical Years Revisited. New York: Jossey-Bass.
- Bombaro, C. (2007). Using audience response technology to teach academic integrity: The seven deadly sins of plagiarism at Dickinson College. *Reference Services Review*, 35(2), 296–309.
- Brent, D. (2005). Reinventing WAC (again): The first-year seminar and academic literacy. *College Composition and Communication*, *57*(2), 253–276.
- Charmaz, K. (2006). Constructing grounded theory: A practical guide through qualitative analysis. Thousand Oaks, CA: Sage.
- Colnerud, G., & Rosander, M. (2009). Academic dishonesty, ethical norms and learning. *Assessment & Evaluation in Higher Education*, *34*(5), 505–517.
- Connelly, R. J. (2009). Introducing a culture of civility in first-year college classes. *JGE: The Journal of General Education*, 58(1), 47–64.
- Fish, R. M., & Hura, G. M. (2013). Student's perceptions of plagiarism. *Journal of the Scholarship of Teaching and Learning*, 13(5), 33–45
- Furman University. (2014). *Teaching First Year Seminars: A Guide (2013-2014)*. Greenville, SC: Furman University. Retrieved January 12, 2015, from http://www.furman.edu/academics/fys/Documents/FYS_Teaching%20Guide_2013_2014.pdf
- Furman University. (2015). Student Handbook. Retrieved January 12, 2015, from http://www.furman.edu/studentlife/studentlife/studenthandbook/Pages/AdministrativePolicies.aspx
- Genereux, R. L., & McLeod, B. A. (1995). Circumstances surrounding cheating: A questionnaire study of college students. *Research in Higher Education*, *36*(6), 687–704.
- Gino, F., Ayal, S., & Ariely, D. (2009). Contagion and differentiation in unethical behavior the effect of one bad apple on the barrel. *Psychological Science*, *20*(3), 393–398.
- Gottschalk, K. (2013). *Indispensable reference for teachers of first-year writing seminars: Academic year 2013-2014*.

- Ithaca, NY: Cornell University: John S. Knight Institute for Writing in the Disciplines. Retrieved from http://www.arts.cornell.edu/knight_institute/forms/IR%2020 13-14-Final.pdf
- Jordan, A. E. (2001). College student cheating: The role of motivation, perceived norms, attitudes, and knowledge of institutional policy. *Ethics & Behavior*, 11(3), 233–247.
- Kobayashi, E., & Fukushima, M. (2012). Gender, social bond, and academic cheating in Japan. *Sociological Inquiry*, 82(2), 282–304.
- Kolb, K. H., Longest, K. C., & Barnett, J. C. (2014). Intellectual Curiosity in Action: A Framework to Assess First-Year Seminars in Liberal Arts Settings. *The Journal on Excellence in College Teaching*, 25(2), 131–156.
- Kolb, K. H., Longest, K. C., & Jensen, M. J. (2013). Assessing the Writing Process Do Writing-Intensive First-Year Seminars Change How Students Write? *Teaching Sociology*, 41(1), 20–31.
- Lau, A. (2004). Teaching engineering ethics to first-year college students. *Science and Engineering Ethics*, 10(2), 359–368.
- Lofland, J., Snow, D. A., Anderson, L., & Lofland, L. H. (2006). Analyzing social settings: A guide to qualitative observation and analysis. Belmont, CA: Wadsworth.
- McCabe, D. L., & Trevino, L. K. (1993). Academic dishonesty: Honor codes and other contextual influences. *The Journal of Higher Education*, 64(5), 522–538.
- McCabe, D. L., & Trevino, L. K. (1997). Individual and contextual influences on academic dishonesty: A multicampus investigation. *Research in Higher Education*, 38(3), 379–396.
- McCabe, D. L., Trevino, L. K., & Butterfield, K. D. (1999). Academic integrity in honor code and non-honor code environments: A qualitative investigation. *The Journal of Higher Education*, 70(2), 211–234.
- McCabe, D. L., Trevino, L. K., & Butterfield, K. D. (2001). Cheating in academic institutions: A decade of research. *Ethics & Behavior*, 11(3), 219–232.
- Miller, A., Shoptaugh, C., & Wooldridge, J. (2011). Reasons not to cheat, academic-integrity responsibility, and frequency of

- cheating. The Journal of Experimental Education, 79(2), 169–184.
- Padgett, R. D., & Keup, J. R. (2011). 2009 national survey of first-year seminars: Ongoing efforts to support students in transition (No. 2). Columbia, SC: University of South Carolina: National Resource Center for the First-Year Experience and Students in Transition.
- Pascarella, E. T., & Terenzini, P. T. (2005). *How college affects students: A third decade of research*. San Francisco, CA: Jossey-Bass.
- Rettinger, D. A., Jordan, A. E., & Peschiera, F. (2004). Evaluating the motivation of other students to cheat: A vignette experiment. *Research in Higher Education*, 45(8), 873–890.
- Roig, M., & Detommaso, L. (1995). Are college cheating and plagiarism related to academic procrastination? *Psychological Reports*, 77(2), 691–698.
- Starke, M., Harth, M., & Sirianni, F. (2001). Retention, Bonding, and Academic Achievement: Success of a First-Year Seminar. Journal of The First-Year Experience & Students in Transition, 13(2), 7–36.
- Thorkildsen, T. A., Golant, C. J., & Richesin, L. D. (2007).
 Reaping what we sow: Cheating as a mechanism of moral engagement. In E. M. Anderman & T. B. Murdock (Eds.), *Psychology of Academic Cheating* (pp. 171–202). Burlington, MA: Elsevier Academic Press.
- Vandehey, M., Diekhoff, G., & LaBeff, E. (2007). College cheating: A twenty-year follow-up and the addition of an honor code. *Journal of College Student Development*, 48(4), 468–480.
- Vowell, P. R., & Chen, J. (2004). Predicting academic misconduct: A comparative test of four sociological explanations. *Sociological Inquiry*, 74(2), 226–249.
- Weiss, R. S. (1994). Learning from strangers: The art and method of qualitative interview studies. New York: Free Press.
- Whitley, B. E. (1998). Factors associated with cheating among college students: A review. *Research in Higher Education*, 39(3), 235–274.