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Teaching Assistants' Preparation for, Attitudes Towards, and Experiences with Academic Dishonesty: Lessons Learned

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This study examined teaching assistants' (TAs) preparation for, attitudes towards, and experiences with academic dishonesty at a public research university. Of 470 TAs, 184 (39%) completed the survey instrument. The major findings of the study were: (a) TAs were more satisfied with their informal than their formal preparation for dealing with academic dishonesty of their students, (b) over 90% of TAs received some form of formal training dealing with academic integrity, (c) a large percentage of TAs have failed to address cheating incidents, and (d) TAs displayed conflicting attitudes towards issues of academic dishonesty. Recommendations for improved practice and further research are provided.

Academic dishonesty has been described as "endemic to the college and university campus" (Pulvers & Diekhoff, 1999, p. 487). While there is a wealth of literature discussing academic integrity from both student and full-time faculty perspectives, there is very little research that deals with teaching assistants' (TAs) experiences with academic dishonesty in the classroom. This is an area that needs to be understood, particularly as TAs continue to play a larger role in undergraduate education. The purpose of this study was to better understand TAs' preparation, attitudes, and experiences regarding academic dishonesty at a public research institution.

Review of the Research Problem

Academic dishonesty is widespread on college and university campuses. Recent literature has reported that the majority of college students cheat, with rates ranging from 57% to 92% (Baetz, Zivcakova, Wood, Nosko, & De Pasquale, 2011; Sterngold, 2004; Vandahey, Diekhoff, & LaBeff, 2007). It has also been reported that cheating has been increasing over the past few decades (Scanlon, 2003). Furthermore, nearly half of high-achieving high school students report the belief that cheating is not necessarily wrong (Shipley, 2009). These data suggest that the decision to cheat is likely a deliberate choice for many students.

Advances in technology have further increased the frequency of students' academic integrity violations. McCabe (2001) noted that the Internet is likely to intensify academic dishonesty. Indeed, four out of five students who cheat on written work used the Internet to do so (McCabe, 2005). Recently, contract cheating, defined as a student hiring others to prepare their written work, has become increasingly commonplace (Walker & Townley, 2012). According to Scanlon (2003), "Widespread use of the Internet may be shaping a new generation of students' conception of 'fair use,' leading them to view the mass of information so freely shared in cyberspace as public knowledge" (p. 161). Another contribution to the problem is the disparity between what is considered cheating from one faculty member to another. In a study in which faculty were asked to determine whether 25 potential actions constituted cheating or not, faculty members only agreed at rates of 75% or higher on 10 of the actions (Higbee & Thomas, 2002).

Another cause of growing academic dishonesty, according to some students, may be faculty attitudes (Walker & Townley, 2012). According to McCabe (2005), "students suggest that faculty who do nothing about what appears to be obvious cheating simply invite more of the same from an ever-increasing number of students who feel they are being 'cheated' by such faculty reluctance" (p. 29). A Duke University study found that 30% of their faculty were aware of cheating and chose to do nothing about it (Ruderman, 2004). According to Schneider (1999), "The number [of faculty] who do nothing is very small, but the number who do very little is very large" (p. A8). How could faculty have such a laissez faire attitude towards academic dishonesty? The reasons likely include a lack of support from administrators, favoritism for certain students, and overly legalistic policies that often find guilty students innocent (McCabe, 2005). Many faculty deal with cheating quickly and quietly because "the university judicial process is laborious, even labyrinthine, and the punishments frequently bear little connection to the crimes" (Schneider, 1999, p. A8).

The use of TAs further exacerbates the problem of academic dishonesty. TAs are often novice classroom instructors without the skill set and confidence that is required to facilitate a culture of academic integrity among their students. Research has found that cheating is 32% more likely to occur in classes taught by TAs (Schneider, 1999). This contributes greatly to the problem of academic dishonesty, particularly at research institutions where a growing number of TAs are teaching courses (Association of Departments of English, 1999). Compounding this problem even further

is a lack of training for TAs. As Calkins and Kelley (2005) noted, "[Faculty] are generally not expected to guide their graduate teaching assistants through the process of teaching, except in a very rudimentary way" (p. 259). A better understanding of TAs' preparation for, attitudes towards, and experiences with students' academic integrity violations must be attained in order for this problem to be more effectively addressed.

Method

This study investigated teaching assistants' preparation for, attitudes towards, and experiences with academic dishonesty at a public research university. The following research questions were investigated:

1. Preparation: How adequately do TAs feel they were prepared for dealing with academic dishonesty
2. Attitudes: What are the attitudes of TAs regarding academic dishonesty?
3. Experiences: What are the experiences of TAs with regard to academic dishonesty?
    a. What percentage of TAs encounter academic dishonesty in their classroom?
    b. What types of academic dishonesty do TAs most frequently experience?
    c. How do TAs respond to incidents of academic dishonesty?
    d. Are TAs satisfied with how reported incidents are handled?
4. Preparation and Attitudes: Does a relationship exist between TAs' preparation for dealing with academic dishonesty and their attitudes towards academic dishonesty?
5. Preparation and Experiences: Does a relationship exist between TAs' preparation for dealing with academic dishonesty and their experiences with academic dishonesty?
    a. Is there a relationship between TAs' preparation and the number of cheating incidents they experience?
    b. Is there a relationship between TAs' preparation and whether or not they respond to cheating incidents?
6. Attitudes and Experiences: Does a relationship exist between TAs' attitudes towards academic dishonesty and their experiences with academic dishonesty?
    a. Is there a relationship between TAs' attitudes and the number of cheating incidents they experience?
    b. Is there a relationship between TAs' attitudes and whether or not they respond to cheating incidents?

Participants

The target population for this study was teaching assistants (TAs) at a public research university consisting of approximately 16,000 undergraduate and 4,000 graduate students. According to Graduate School data, there were 470 TAs on campus during the Spring 2010 semester when this study was conducted.

Instrumentation

The survey that was used to collect data from participants consisted of three main parts. The first part of the survey included questions regarding TAs' demographic characteristics, past teaching experiences, and their experiences with academic dishonesty in the classroom. The second part of the survey assessed how adequately TAs felt prepared for dealing with academic dishonesty, and the third part included questions regarding TAs' attitudes towards academic dishonesty. The researchers designed the survey based on the thorough review of existing research and tested during two pilot tests, which resulted in minor wording changes to provide better clarity.

The initial portion of the survey contained questions about TAs' demographic information and their experiences with academic dishonesty. The demographic questions surveyed participants' gender, race, number of semesters as a TA, course load, average number of students, and number of courses taught in their career. In terms of their experiences with academic dishonesty, TAs were asked the number of cheating incidents they had experienced, their typical responses to cheating, the types of cheating experienced, reasons for ignoring cheating, and satisfaction with the university conduct board process.

The survey also included questions that dealt with how adequately TAs felt prepared for dealing with academic dishonesty. It surveyed both TAs' formal and informal preparation for academic dishonesty relating to four themes: what constitutes academic dishonesty (Higbee & Thomas, 2002), proactive strategies for dealing with academic dishonesty (McCabe, 2005; Vandahey et al., 2007), reactive strategies for dealing with academic dishonesty (Coalter, Lim, & Wanorie, 2007; Walker & Townley, 2012), and the procedures for responding to and reporting cheating incidents (Ruderman, 2004). These four themes were selected because they represented the four most common themes in the overall literature on academic dishonesty. For the purpose of this study, formal preparation referred to department or institution-sponsored training sessions on academic dishonesty and any sessions TAs may have attended at conferences. Informal preparation referred to actions initiated by TAs themselves to gain a better understanding of students' academic integrity violations

and how to deal with them, such as online research, self-directed reading, questions directed to a faculty member or colleague, or advice sought from a faculty advisor. For this study, formal and informal preparations were examined separately in order to attain a more nuanced profile of TAs' preparation levels received from both structured opportunities for training and other alternative self-initiated means. The researchers felt this approach was important considering the evidence that TAs often cite informal training as their first source of knowledge regarding classroom teaching (Breslow & Tervalon, 2005). Respondents assessed their preparation for each of the themes using a 5-point Likert scale (1 = *no preparation*, 2 = *inadequate*, 3 = *somewhat adequate*, 4 = *adequate*, and 5 = *more than adequate*).

The last part of the survey focused on TA attitudes towards academic dishonesty. This instrument included eight statements. Respondents rated each statement using a 4-point Likert scale (1 = *strongly disagree*, 2 = *disagree*, 3 = *agree*, and 4 = *strongly agree*). The content of these eight items was derived from four attitudinal themes frequently discussed in the literature, with two items addressing each theme. These themes included the seriousness of academic dishonesty (Higbee & Thomas, 2002; McCabe, 2005), prevalence of academic dishonesty (Baetz et al., 2011; McCabe, 2005), ability to affect academic dishonesty within the TAs' courses (Levy & Rakovski, 2006), and importance of addressing academic dishonesty with students (Coalter, Lim, & Wanorie, 2007; Schneider, 1999).

Procedures

After approval was received from the Institutional Review Board (IRB) to conduct the study, the questionnaire was distributed to the target population with permission of the Graduate School via a TA list-serv kept by the Associate Dean of the Graduate School in Fall 2010. This e-mail contained an introduction to the study, a statement of informed consent, and a link to the actual questionnaire. Participants completed the survey using SurveyMonkey, an online research tool that collects survey data. One hundred forty-six TAs completed the questionnaire after the initial e-mail. A second e-mail was sent out two weeks following the initial invitation. This yielded an additional 74 responses. Of the 220 total responses received, 26 were excluded because the respondents did not complete the survey. An additional 10 responses were excluded because respondents reported having no teaching experience. This yielded a total of 184 respondents for a final response rate of 39.1%.

Data Analysis

Data were collected using the SurveyMonkey web utility. These data were then downloaded into an Excel spreadsheet. The Statistical Package for the Social Sciences (SPSS) software was used to conduct statistical analysis of the data. A summary of demographic information was computed using descriptive statistics. Research questions were addressed as appropriate using a combination of descriptive and inferential statistics, including Pearson's product moment-correlations and biserial correlations.

Results

Tables 1, 2, and 3 show the demographic data of the respondents. A cross-tabulation of participants' gender and race is given in Table 1. The participants' overall teaching experience, including total number of semesters and courses taught, is included in Table 2. The participants' current teaching experience, including current course load and average class size, is indicated in Table 3.

Preparation

The mean rating for formal preparation among Teaching Assistants was 3.04 (SD = 1.05). Responses and means for the four areas surveyed are shown in Table 4. TAs felt most formally prepared about what is considered cheating (M = 3.21, SD = 1.22) and how to address cheating (M = 3.22, SD = 1.22) and least formally prepared in how to detect cheating (M = 2.78, SD = 1.21). Between 15.2% and 21.7% of TAs received no formal preparation in one area, with the most common area being how to detect cheating. Eighteen (9.8%) TAs reported receiving no formal preparation at all.

The mean informal preparation among Teaching Assistants was 3.39 (SD = 0.93). Responses and means for the individual four areas surveyed are depicted below in Table 5. TAs felt that their informal preparation was strongest in what incidents are considered cheating (M = 3.56, SD = 1.05) and weakest in how to detect cheating (M = 3.24, SD = 1.12). TAs reported their informal preparation in regard to academic dishonesty to be more adequate than their formal preparation in each of the four areas. Seven (3.8%) of the TAs received no informal preparation at all.

A cumulative preparation score consisting of the average of formal preparation scores and informal preparation scores was calculated. This yielded a mean score of 3.21 (SD = 0.87).

Attitudes

Respondents were asked to indicate their attitudes in regards to eight statements about academic

Table 1
Participants by Gender and Race

Race	Male	Female	Total
African American	1	1	2
American Indian/Alaskan Native	0	2	2
Asian or Pacific Islander	3	3	6
Caucasian	55	88	143
Hispanic	4	2	6
International Student	15	10	25
Total	78	106	184

Table 2
Participants by Overall Teaching Experience

Teaching experience	*N*	%
Total semesters taught		
1	21	11.4
2	57	31.0
3	18	9.8
4	34	18.5
5	17	9.2
6+	37	20.1
Total courses taught		
1	23	12.5
2	24	13.0
3	17	9.2
4	28	15.2
5	13	7.1
6	8	4.3
7	5	2.7
8	16	8.7
9	4	2.2
10+	46	24.9

Table 3
Participants by Current Semester Teaching Experience

Teaching experience	*N*	%
Course load		
0	22	12.0
1	58	31.5
2	76	41.3
3	17	9.2
4	7	3.8
5+	4	2.2
Average class size		
< 25	87	47.3
26.50	63	34.2
51-75	18	9.8
76-100	4	2.2
101-150	3	1.6
>150	6	3.3

Table 4
Teaching Assistants' Formal Preparation for Dealing with Academic Dishonesty

Preparation Area	NP	%	IP	%	SAP	%	AP	%	MAP	%	*M*
What incidents are considered cheating?	30	16.3	13	7.1	49	26.6	73	39.7	19	10.3	3.21
Things you can do to prevent cheating.	30	16.3	29	15.8	53	28.8	60	32.6	12	6.5	2.95
How to detect cheating.	37	20.1	37	20.1	51	27.7	47	25.5	12	6.5	2.78
Policies for addressing and reporting cheating.	26	14.1	23	12.5	47	25.5	64	34.8	24	13.0	3.22

Note. NP = no preparation (1), IP = inadequate preparation (2), SAP = somewhat adequate preparation (3), AP = adequate preparation (4), MAP = more than adequate preparation (5).

Table 5
Teaching Assistants' Informal Preparation for Dealing with Academic Dishonesty

Preparation Area	NP	%	IP	%	SAP	%	AP	%	MAP	%	*M*
What incidents are considered cheating?	12	6.5	12	6.5	49	26.6	80	43.5	31	16.8	3.56
Things you can do to prevent cheating.	16	8.7	20	10.9	52	28.3	77	41.8	19	10.3	3.35
How to detect cheating.	17	9.2	21	11.4	63	34.2	61	33.2	22	12.0	3.24
Policies for addressing and reporting cheating.	15	8.2	22	12.0	53	28.8	69	37.5	25	13.6	3.36

Note. NP = no preparation (1), IP = inadequate preparation (2), SAP = somewhat adequate preparation (3), AP = adequate preparation (4), MAP = more than adequate preparation (5).

dishonesty (e.g., cheating is a serious offense). As indicated earlier, respondents were asked to rate their agreement with each statement on a 4-point scale using the following responses: 1 = *strongly disagree*, 2 = *disagree*, 3 = *agree*, and 4 = *strongly agree*. The overall mean of their responses was 3.28 (Min = 2.17, Max = 4.00, *SD* = 0.34). See Table 6 for a statistical summary of their ratings for each individual statement.

Experiences

Respondents were asked several questions about their experiences with cheating in the courses that they teach. One hundred fifty-seven participants (85.3%) reported experiencing at least one incident of cheating during their time as a TA. The mean number of cheating incidents experienced was 2.93 (Min = 0, Max = 17, *SD* = 2.90).

Of the types of cheating surveyed, the most common ones experienced by TAs were plagiarism that involved using content from a published work without a citation (experienced by 44% of TAs) and copying test answers from another student (43.5%). See Table 7 for the responses to this question. Participants were also able to write in responses to describe types of cheating they had experienced that were not included as answer options for the question. Twenty-one (11.4%) participants provided additional information. Of these write-in responses, six TAs reported catching students using cell phones during an examination to look up answers or to send and receive answers via text message. Other types of cheating reported were turning in the same work for multiple courses, writing an absent student's name on a group quiz, using files of prior tests kept by fraternities, and correcting a quiz after it had been graded and returned to the student.

The 157 TAs who reported experiencing some form of cheating were asked about the ways that they typically responded to cheating incidents. The majority of TAs typically spoke directly with the student (76.4%), consulted with the lead faculty member (63.9%), and gave the student an "F" on the assignment (58.6%). Fifteen (9.6%) of the TAs routinely ignored cheating incidents. Table 8 provides a summary of their responses. Other responses to cheating provided by TAs in the write-in section included issuing warnings, providing additional tutoring, making students redo assignments, deducting one letter grade from the student's final course grade, deducting points from an assignment, discussing cheating with the class as a whole, and changing classroom procedures to prevent future cheating.

The next question sought to determine TAs' reasons for ignoring cheating. Of the 157 TAs that

Table 6
Teaching Assistants' Attitudes Towards Academic Dishonesty

Statement	SD	%	D	%	A	%	SA	%	*M*
Cheating is a serious offense.	2	1.1	1	0.5	43	23.4	138	75.0	3.73
Cheating is one of the most important problems in higher education.	7	3.8	37	20.1	93	50.4	47	25.5	2.98
Most students have cheated on college coursework at least once.	6	3.2	61	33.2	84	45.7	33	17.9	2.76
Students rarely cheat in the courses I teach.	10	5.4	61	33.2	101	54.9	12	6.5	2.63
I play an important role in preventing cheating in the classes I teach.	4	2.2	27	14.7	104	56.5	49	26.6	3.07
If students want to cheat, they are going to cheat regardless of what I do.	12	6.5	96	52.2	58	31.5	18	9.8	2.44
Talking to my class about academic integrity at the start of the semester is important.	2	1.1	11	6.0	74	40.2	97	52.7	3.46
It is important to address suspected cheating quickly.	0	0.0	2	1.1	60	32.6	122	66.3	3.66

Note. SD = *strongly disagree*, D = *disagree*, A = *agree*, and SA = *strongly agree*.

Table 7
Types of Cheating Reported by Teaching Assistants

Type of cheating	*N*	%
Copying another student's work.	70	38.0
Copying test answers from another student.	80	43.5
Copying test answers from a cheat sheet/crib sheet.	26	14.1
Collaborating on an assignment that was intended for individual work only.	54	29.3
Turning in a paper purchased online.	16	8.7
Using content from a published work without citing it.	81	44.0

Table 8
Teaching Assistants' Usual Responses to Cheating Incidents

Response	*N*	%
Consulted with the lead faculty member.	100	63.9
Gave the student an "F" on the assignment.	92	58.6
Gave the student an "F" in the course.	11	7.0
Ignored the incident.	15	9.6
Reported the student a department head or dean.	25	15.9
Reported the student to the campus judicial board.	37	23.6
Spoke with student.	120	76.4

experienced cheating, 37 (23.5%) had never failed to respond to a cheating incident. The remaining 107 (76.5%) had failed to respond to a cheating incident on at least one occasion. Of these 107 TAs, the majority (87.9%) reported they had failed to address cheating due to not having enough evidence. The least common rationale for failing to respond to cheating was fear of retaliation from the student (6.5%). See Table 9 for more details. Several reasons were also given in the write-in section of the question. These included apathy, the belief that the judicial process was biased against the student, the belief that the judicial process was too lenient, the desire to avoid a "he said, she said" situation, the desire to avoid having to deal with a student's parents, and being instructed by the lead professor not to report the incident.

The final question regarding TA experiences with academic dishonesty sought to determine satisfaction

Table 9
Teaching Assistants' Reasons for Ignoring Suspected Cheating

Reason	*N*	%
Have heard about other faculty and/or TAs' bad experiences with confronting cheating.	21	19.6
Not enough evidence to prove cheating.	94	87.9
Judicial process is too complicated and/or time consuming.	21	19.6
Judicial process is unfair to accusers.	15	14.0
Unsure of how to address the incident.	22	20.6
Worried about retaliation from the student.	7	6.5

Table 10
TAs' Satisfaction With the University Judicial System

Satisfaction level	*N*	%
Satisfied	16	43.2
Somewhat satisfied	16	40.5
Not satisfied	6	16.2

with the university judicial system in terms of addressing suspected academic misconduct. Of the respondents who experienced cheating, 37 (23.6%) had referred a student to the Office of Community Standards and Student Ethics on at least one occasion. Table 10 displays the results to this question.

Relationship Between Preparation and Attitudes

Pearson product-moment correlations were conducted to determine if a relationship existed between TAs' perceptions of their formal, informal, and total preparation for dealing with academic dishonesty and their attitudes towards academic dishonesty. The results of these correlations showed several statistically significant relationships. The statement, "Most students have cheated on college coursework at least once," was negatively correlated with formal (r = -.229, p < .01), informal (r = -.209, p < .01), and total (r = -.249, p < .01) preparation. The statement, "Students rarely cheat in the courses I teach," was positively correlated with formal (r = .229, p < .01), informal (r = .216, p < .01), and total (r = .253, p < .01) preparation. The statement, "I play an important role in preventing cheating in the classes I teach," was also positively correlated with formal (r = .193, p < .01), informal (r = .307, p < .01), and total (r = .279, p < .01) preparation. Finally, overall attitudes had weak positive correlations with informal (r = .170, p < .05) and total (r = .167, p < .05) preparation.

Relationship Between Preparation and Experiences

Pearson product-moment correlations were conducted to determine if a relationship existed between preparation and the number of cheating incidents TAs experienced. No significant correlations were found. Biserial correlations were conducted to determine if a relationship existed between preparation and TAs' responses to cheating incidents. There was a significant positive correlation between informal preparation and whether or not TAs responded to cheating incidents (r = .217, p < .01). There was also a weak positive correlation between total preparation and TAs' responses to cheating (r = .162, p < .05). No statistically significant correlations were found between formal preparation and TAs' responses to cheating.

Relationship Between Attitudes and Experiences

Pearson product-moment correlations were used to examine the relationship between TAs' attitudes and the number of cheating incidents they experienced, while biserial correlations were used to examine the relationship between TAs' attitudes and their responses to cheating. Two statistically significant relationships were observed when examining the associations between TAs' attitudes towards academic dishonesty and the number of cheating incidents they experienced. There was a significant negative correlation between the number of incidents experienced and the level of agreement with the statement, "Students rarely cheat in the courses I teach" (r = -.310, p < .01). There was also a significant positive correlation between the number of cheating incidents experienced and overall attitudes (r = .198, p < .01). Only one statistically significant correlation was found when examining relationships between TAs' attitudes and their responses to cheating incidents. More specifically, a weak positive correlation was observed between TAs' responses to cheating and

level of agreement with the statement "It is important to address suspected cheating quickly" ($r = .179$, $p < .05$).

Discussion

Preparation

TAs reported being more satisfied with the quality of their informal preparation (e.g., advice from faculty members, self-study) than their formal preparation (actual training provided by the institution). The greater satisfaction with informal training makes sense for several reasons. First, formal training on academic dishonesty generally occurs early in a TA's career, before he or she has had much classroom experience. Informal training is typically sought out by the TA at a time when the topic is more relevant to them, such as upon suspecting a student of cheating. Additionally, while formal training usually is delivered by a presentation to a group of TAs, informal training would generally be discussion based in a one-on-one setting, which allows TAs to more easily obtain the information they feel is most beneficial to them.

The majority of TAs (90.2%) received at least some form of formal training regarding academic dishonesty. This was surprising because anecdotal evidence along with some research suggested that TAs often do not receive in-depth formal training. In fact, Breslow and Tervalon (2005) found that most TAs' primary sources for training were informal conversations with supervisors and mentors. A related finding of significance was that 21.7% of TAs did not receive formal preparation in at least one of the four major areas surveyed. These results show that while most TAs are getting formal training on issues of academic integrity, there is certainly the ability to provide broader training on the topic.

Attitudes

It is clear that the TAs in the study consider academic integrity to be important. A large majority (98%) of the TAs who participated in this study believed academic dishonesty to be a "serious offense" and agreed that it is important to address suspected cheating quickly. These are attitudes that one would hope to see from undergraduate instructors and future faculty members. This suggests that these TAs may be receptive to learning strategies for improving academic integrity in their classrooms.

According to Schneider (1999), "The number [of faculty] who do nothing [about cheating] is very small, but the number who do very little is very large" (p. A8). This also appears to hold true for TAs in this study. While fewer than ten percent of TAs reported that their usual response to cheating was to ignore it, over three-fourths (76.5%) reported having ignored suspected cheating at least once. This is problematic because it can send the message that TAs do not care if students cheat. If students feel that their instructors do not care about cheating, they sometimes use this as justification for their decision to engage in academic dishonesty (Levy & Rakovski, 2006).

Another interesting finding was the existence of conflicting attitudes among TAs. Nearly two-thirds (63.6%) of TAs agreed that most college students have cheated; however, only 38.6% believed that students were cheating in their courses. Additionally, while 83.2% of TAs believed that they play an important role in preventing cheating, 58.7% agreed with the statement, "If students want to cheat, they will cheat regardless of what I do." A possible explanation for these conflicting attitudes is attribution theory, which assumes that people will interpret their environment in a way that allows them to maintain a positive self-image (Harvey & Martinko, 2009). Thus, TAs would realize that cheating is widespread but refuse to believe that it occurs in their courses. Attribution theory also suggests that TAs, while believing that they can prevent cheating, would explain any cheating actually experienced as beyond their control.

Experiences

The results of the study indicate that traditional methods of cheating remain the most popular and are being aided by technology. The TAs in this study reported most frequently experiencing plagiarism (44%) and copying test answers from other students (43.5%). However, almost nine percent of TAs reported having a student turn in a paper that was purchased online, and six wrote in responses about discovering students using cell phones to look up or text answers during a test. This supports McCabe's (2001) theory that technology will increasingly support the cheating epidemic. With the rapid speed with which technology advances, it is likely that students will find easier, more efficient ways of cheating. Because of this, it is important that TAs receive continuous training about preventing and detecting cheating.

Relationships

An interesting relationship was observed between TA preparation and attitudes. There was a negative relationship between all types of preparation (i.e., formal, informal, and total) and the belief that most college students have cheated at least once. Each type of preparation was also positively correlated with the belief by TAs that students rarely cheated in their courses. In other words, TAs who reported feeling better prepared for dealing with issues of academic

dishonesty were less inclined to believe that students were cheating, particularly in the courses they teach. Since we know that cheating is pervasive on college campuses and that 85.3% of TAs who participated in this study reported experiencing cheating, these views were probably unrealistic. When this is coupled with the fact that no relationship was found between preparation and the number of cheating incidents experienced, it suggests that preparation for dealing with academic dishonesty by TAs in this study deserves additional attention.

Recommendations for Improved Practice

Based upon the results of this study, the researchers offer the following recommendations for improved practice. First, since informal preparation was consistently rated higher than formal preparation, the institution should make an effort to provide more opportunities for informal training. For example, departments could place an increased emphasis on mentoring relationships between faculty and TAs. Additionally, the Graduate School could designate a contact to call with any questions about addressing academic dishonesty. They could also publish an online Frequently Asked Questions guide to issues of academic dishonesty so that TAs could access reliable information at any time. Another option would be to develop a TA handbook that would include, along with other relevant topics, information about preventing and responding to academic dishonesty.

Second, institutions would be well advised to include a session on academic integrity as a core component of orientations for new TAs. The most essential topics to include would be an overview of the prevalence of cheating, strategies for preventing and detecting cheating, and the institution's process for addressing these incidents. The bulk of the information presented should be strategies for proactively preventing cheating that can be easily applied to the classroom setting. This training would ensure TAs have a base of information prior to their first experience as an instructor.

Additionally, departments should purchase plagiarism detection software and train TAs on how to use it. Forty-four percent of TAs reported encountering plagiarism in their courses. This is congruent with findings in the literature that plagiarism is the most prevalent means of cheating in college (McCabe, 2005). Utilizing this software would enable TAs to detect more cheating incidents and serve as a stronger deterrent to students who are considering cheating.

TAs must clearly delineate when collaborative work is allowed and when it is considered dishonest. Since these expectations vary considerably from instructor to instructor and assignment to assignment, it is essential to make this clear to students. Higbee and Thomas (2002) found faculty members split on whether or not collaborative work should be supported or considered dishonest, which can send mixed messages to students. Additionally, 29.3% of TAs in this study reported having students collaborate on assignments that were intended for individual work. While many of those students may have intentionally committed academic dishonesty, it is highly likely that at least some of those cases occurred due to confusion about expectations.

If TAs are not already doing so, they should include a candid discussion about academic integrity during the first day of class. This will convey to students that their instructors value ethical academic conduct. It also gives TAs an opportunity to clearly cover their expectations and provides students an opportunity to ask questions. This is important because research has found that students often use a perceived apathy towards cheating on the part of faculty as justification to cheat (Levy & Rakovski, 2006; McCabe, 2005). TAs should support this conversation by having an academic integrity statement as a part of the syllabus. This statement could include a definition of academic integrity, a request that students report potential unethical behavior they observe, and the potential consequences of cheating in the course.

Instructors should consider taking steps to reduce the pressure on students in their courses. This can be done by providing more opportunities for students to demonstrate mastery of the material. Instead of designing a course with one or two major papers or exams, instructors can have four or five examinations, periodic quizzes, or multiple short writing assignments. By doing this, students are tested on smaller chunks of material more frequently and have more opportunities to demonstrate their knowledge. Additionally, this prevents the majority of a student's grade resting on his or her performance on one large assignment or test, which may reduce a student's perception of the need to cheat.

TAs should consider having students sign an academic integrity pledge upon turning in their work. This pledge could be included as a short statement that students must sign at the end of examinations or as a cover sheet to attach to major papers. McCabe and Trevino (1996) found that honor pledges such as this tend to increase academic integrity among students. This provides a simple and low-effort way to keep the issue of integrity in front of students and require them to reflect on their decisions prior to submitting their work.

Another in-class strategy for instructors is to clearly articulate the goals of the course and specific assignments to students. Creating and sharing learning objectives is one way to help students understand exactly what they should be learning from the course and will help them to know the areas upon which to

focus their studies. For writing assignments, sharing rubrics provides additional clarity to students regarding exactly how their work will be graded. Both of these strategies may help students to feel more comfortable in the course by giving them a better understanding of what the instructor expects from them.

Finally, TAs should be strongly encouraged to report suspected cheating incidents to the Office of Student Conduct and Community Standards. Only 20.1% of TAs who participated in this study had referred a student through the formal conduct process; however, 83.7% of those TAs reported being satisfied with that experience. This is in direct contrast with much of the literature on faculty experiences, which finds that faculty are often unhappy with the formal conduct process of universities (Coalter et al., 2007; McCabe, 2005; Schneider, 1999). However, the positive experiences of TAs in this study are encouraging and a sign that the process can be perceived as effective and worthwhile.

Recommendations for Further Study

The most obvious limitation is the fact that this study assessed the preparation, attitudes, and experiences of TAs at one point in time on one campus. Due to this, any findings should not be generalized to other campuses or to TAs in general. Although it may be assumed that the experiences observed in this study may be congruent with those of TAs at institutions with similar demographics, further research is needed for this to be confirmed. It would also be worthwhile to further investigate whether TAs' attitudes towards academic dishonesty change over time or whether TAs' preparation for, attitudes towards, and experiences with academic dishonesty are similar with those of faculty members. Future study can also be designed to include focus groups and other qualitative methods. This would provide an added depth to the subject matter that could be paired with the results of this study to create a more thorough understanding of TAs' experiences with academic dishonesty. Future study can also be conducted to compare TAs' preparation for, attitudes towards, and experiences with academic dishonesty at various types of institutions or with TAs of similar institutions but with different training models (e.g., required day long orientations or on-campus teaching development centers). It would be interesting to examine whether certain instructional strategies would negate students' perceived need to cheat. Potential strategies include utilization of learning objectives, clear syllabi, criterion-referenced grading, in-class discussions of academic integrity, and using multiple teaching approaches. Finally, an important area of research would be the application of attribution theory to understanding TAs' attitudes towards academic dishonesty. As previously discussed, TAs in this study appeared to view cheating as something that occurs in other instructors' classes or something that they were powerless to affect. Attribution theory may help to understand these attitudes and how to best address them through training.

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