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Faculty and student perceptions of post-exam attendance

**Trent W. Maurer¹, Laura Frost², Diana Sturges³, Simone Charles⁴, Deborah Allen⁵,
Michelle Cawthorn⁶, and Cherry C. Brewton⁷**

Abstract: This project investigated differences between faculty and student perceptions of student attendance in courses for the class period after an exam, including factors thought to influence student attendance. Participants from a single university completed a mixed-methods on-line questionnaire. Quantitative analyses revealed significant differences between faculty and student perceptions on all but one project variable. Qualitative analyses reinforced those findings and suggested that faculty misunderstand what factors actually influence student attendance. Taken together, the results suggest a substantial disconnect between faculty and student perceptions of the importance of class attendance and highlight areas for faculty to influence student attendance.

Keywords: post-exam attendance, perceptions, faculty-student differences

“When substantial numbers of students do not attend, classroom learning is depreciated, student and teacher morale suffer, and academic standards are compromised” (Brown, 2002, p. 101).

This investigation uses an online mixed-methods survey to explore faculty and student perceptions of course attendance for the class period immediately following a course examination. It addresses three key gaps in the prior literature on this subject: 1. What are the factors that influence overall perceived absence for that class period? 2. How similar or dissimilar are faculty and student beliefs about the causes of absence for that class period? 3. How are student beliefs about the causes of absence related to their own attendance for that class period?

I. Prior Research on Class Attendance.

Student classroom attendance is a popular topic of both empirical research (Friedman, Rodriguez, and McComb, 2001; Gump, 2004; Launius, 1997) and faculty discussions (much_metta, 2008). Both the research and the discussions focus on the central question: Why don't students attend every class? Although faculty perceptions are based on their own

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idiosyncratic experiences in the classroom, those perceptions are validated by the research: As many as one-third of students are absent from a class on any given day (Marburger, 2001) and as few as 8% of students attend every class in a given course, with nearly 25% attending less than two-thirds of the classes (Cohn and Johnson, 2006).

As educators, many university faculty are rightfully concerned about student absences since substantial empirical research, and their own experiences, have demonstrated that attendance is related to student performance and grades, even in courses where attendance is not a part of the grading system (Brewer and Burgess, 2005; Gump, 2005). Marburger (2001) documented that missing a class period increased the probability of responding incorrectly to an exam question about material covered that day by nearly 15%.

Collectively, a correlation between student absence, student performance, and the relative commonality of absences indicates a missed opportunity for students to learn or reach their full potential. Unfortunately, research indicates that students do not view the situation that way (Moore, Armstrong, and Pearson, 2008). In spite of faculty and administrative beliefs that what happens in the classroom is valuable, interesting, and important, and that students have an obligation to attend every class, many students do not perceive classes as worthwhile and do not feel obligated to attend (Moore et al., 2008), even at taxpayer-subsidized public institutions (Hassel and Lourey, 2005). This disconnect between faculty and student perceptions is consistent with prior research that has demonstrated that students bring different values, assumptions, priorities, and motivations to college than those shared by faculty (Perry, 1988).

Students primarily view classroom attendance in terms of commodification, exchange, or transaction, arguing, “they had paid for the class, they should be able to decide whether to go or not” and that as long as students could get a good grade, they should not have to attend class (Hassel and Lourey, 2005, p. 5). Indeed, only 17% believed learning was related to attendance, and just 4% believed that student performance would be influenced by attendance.

Evidence of the factors that influence student attendance supports this commodification perspective. Students are more likely to attend class: if they consider the material or instructor interesting (Gump, 2004), if in-class quizzes are announced (Azorlosa and Renner, 2006), if attendance is required for their grade and if there are direct consequences for absenteeism (Friedman et al., 2001; Gump, 2004; Launius, 1997). Students are less likely to attend class if attendance is not required, especially later in the semester (Marburger, 2006); if they are assigned to larger classrooms vs. smaller classroom settings, where they perceive their absence will not be as noticeable (Friedman et al., 2001; Marburger, 2001); if they perceive a negative effect on their attendance likelihood if given full notes for the class period by the instructor (Cornelius and Owen-DeSchryver, 2008); or if they believe that regular attendance should be factored in to final grades (Hassel and Lourey, 2005). Moore et al. (2008) reported that only 17% of students’ classroom absences can be categorized as potentially excused (e.g., medical emergencies); 23% were related to giving higher priority to academic work in other classes (e.g., cutting class to study for another test), and 60% were related to low intrinsic motivation (e.g., too tired, class is boring).

Despite the substantial amount of prior research on the topic of student attendance, there is a specific type of student absence that is discussed among faculty, and remains a source of great concern and frustration, but has never previously been investigated. This is the absenteeism associated with the post-exam class period. A recent thread on the *Chronicle of Higher Education* online fora suggested that absenteeism for this single class period could reach levels as high as 40% and was a relatively common phenomenon (much_metta, 2008). Potential

reasons suggested for this pattern were course level, course size, and five specific student perceptions. These perceptions are that students believe: (a) nothing important will be covered during that period; (b) no effort is required before studying for the next exam; (c) class attendance will not affect their final grades, especially in classes where attendance is not recorded; (d) missing this particular class will not change their grade on their next test; and (e) attendance has no correlation to how much they learn in a course. According to literature reviewed above, all of these misperceptions are common.

The reasons that many faculty are concerned about this absenteeism are threefold. First, it is a symptom of larger absenteeism throughout the course, which prior research has documented leads to poor academic performance. Second, because of their awareness of the connection between attendance and performance, many faculty expend considerable time and effort attempting to increase student attendance in order to maximize student success. Third, and specifically related to these unique class periods, many faculty use those course periods to either review examinations or introduce the foundation for new units in the course. Both of those uses can disproportionately influence student learning in the course in comparison to many other course days, so absenteeism on those days can pose an even greater threat to student learning.

To address the gap in the literature on post-exam attendance, this preliminary investigation will utilize a convenience sample to explore the issues surrounding faculty and student perceptions of post-exam attendance and the factors thought to influence it. A convenience sample is the most appropriate choice for this preliminary stage for three reasons: 1. Convenience samples are common in Scholarship of Teaching and Learning [SoTL] research, particularly in research on class attendance (Brewer and Burgess, 2005; Moore et al., 2008; Stuckey, 2008). 2. Convenience samples are considered methodologically acceptable in investigations where the objective is to conduct preliminary research or to explore theoretical relationships between variables, rather than to describe a representative sample (Brown, Cozby, Kee, and Worden, 1999; Cho, 2006). Indeed, rigorous and expensive sampling from large populations is not justified for preliminary investigations (Pyrzczak, 2005). 3. Perceptions can be reliably tested with any sample capable of perceiving them so long as the purpose of that test is to explore the relationships between and among them, rather than generalizing those specific perceptions as common to all populations.

Specifically, it hypothesizes:

H1: Perceived post-exam attendance will be influenced by the following factors: course level, course size, motivation for taking the course (e.g., core, major, elective), attendance policy, post-exam day curriculum (e.g., review, new material), and group membership (faculty/student).

H2: Students will significantly differ from faculty in their perceptions of student attitudes about post-exam attendance.

H3: Student perceptions will be related to their own post-exam attendance.

Additionally, qualitative questions further explore both student and faculty perceptions of the issues connected to post-exam attendance.

II. Method.

A. Participants.

There were two categories of participants: faculty (N=109) and students (N=377). Demographic information for both groups is presented in Table 1.

Table 1. Demographic Information.

Variable	Group	
	Faculty (N = 109)	Student (N = 377)
Gender		
Male	60 (55.0%)	171 (45.4%)
Female	49 (45.0%)	206 (54.6%)
Ethnicity		
White	102 (93.6%)	315 (83.6%)
African-American	2 (1.8%)	44 (11.7%)
Hispanic	1 (0.9%)	6 (1.6%)
Asian	0 (0.0%)	3 (0.8%)
Other	4 (3.7%)	8 (2.1)
College		
Business	6 (5.5%)	—
Education	7 (6.4%)	—
Health/Human Sciences	20 (18.3%)	—
Information Technology	4 (3.7%)	—
Liberal Arts/Social Sciences	23 (21.1%)	—
Science and Technology	47 (43.1%)	—
Other	2 (1.8%)	—

Note. One student failed to report ethnicity. Only faculty were asked to list College.

B. Materials.

All participants completed an IRB-approved on-line mixed-methods questionnaire. The questionnaire was administered through Survey Monkey and participants had to provide a password to access the questionnaire. This questionnaire consisted of three demographic questions (one for faculty only), six course questions, eight perception questions (one for students only), and five qualitative questions (one for faculty only). See Appendix.

Both faculty and students received identical questionnaires with the following three exceptions: 1. Faculty were asked to indicate which college within the university housed their department. 2. Faculty were asked an extra qualitative question, “What do you do in your course to encourage attendance for the class period immediately following an exam?” 3. Students were asked an extra quantitative question, “On average, how likely are you to go to class for the class period immediately following an exam compared to other non-exam days in that course?”

C. Procedure.

Faculty and students at a southeastern American university with an enrollment of approximately 17,000 students were invited to participate in an on-line survey about student attendance. All university faculty ($N = 690$) were notified via email of the existence of the survey, the invitation to participate, the web address, and the password. Faculty members who taught in the undergraduate program were encouraged to tell their students about the survey in their courses. Students were notified about the survey in classes from participating faculty and the authors. Faculty and students who wanted to participate navigated to the web page for the survey, entered the provided password sent with the invitation to participate, and completed the survey. The faculty response of 109 reflects a response rate of 15.8%. Because not all students may have been notified about the survey, it was not possible to calculate the student response rate.

III. Results.

A. Perceived attendance analyses.

Roughly half of the combined sample perceived a decline in post-exam attendance (46.9%), and half perceived no change in attendance (48.4%), with just 4.7% reporting an increase in attendance. To explore potential influences on perceptions of changes in post-exam attendance, we conducted a 2 (Faculty/Student) \times 4 (Course Level) \times 5 (Reason for Taking) \times 11 (Class Size) \times 4 (Post-exam Day Curriculum) \times 7 (Attendance Policy) univariate ANOVA, with perceived post-exam attendance in the target course as the dependent variable. The model was significant, $F(27, 437) = 2.17, p < 0.01$, partial $\eta^2 = 0.12$, but the only independent variable to emerge as significant was Class Size, $F(10, 437) = 2.50$, partial $\eta^2 = 0.05$. Sheffe post hoc analyses revealed significant differences between the under 25 class size ($M = 2.84, SD = 0.77$) and the 176-200 ($M = 2.00, SD = 0.77$), $p < 0.05$, Cohen's $d = 1.11$, and 201-225 ($M = 2.1, SD = 0.88$), $p < 0.05$, Cohen's $d = 0.90$, class sizes.

B. Perception analyses.

A correlation matrix for the seven perception questions assessed potential intercorrelations to determine whether multivariate analyses were necessary. See Table 2. Most of the perception questions were significantly correlated with at least one other perception question at the $p < 0.05$ level, which necessitated multivariate analyses. To assess potential differences in perceptions between faculty and students, a MANOVA was conducted with all seven perception questions as dependent variables and group membership (faculty/student) as the independent variable. A significant multivariate effect emerged for group membership, Pillai's Trace = 0.21, $F(7, 438) = 16.47, p < 0.001$, partial $\eta^2 = 0.21$. Follow-up univariate ANOVAs for all seven dependent variables revealed six significant models: Important, $F(1, 444) = 32.75, p < 0.001$, partial $\eta^2 = 0.07$; Grades, $F(1, 444) = 7.54, p < 0.01$, partial $\eta^2 = 0.02$; Course Learning, $F(1, 444) = 17.51, p < 0.001$, partial $\eta^2 = 0.04$; Exam, $F(1, 444) = 55.873, p < 0.001$, partial $\eta^2 = 0.11$; Less Learning, $F(1, 444) = 62.45, p < 0.001$, partial $\eta^2 = 0.12$; and Class Size, $F(1, 444) = 10.89, p < 0.01$, partial $\eta^2 = 0.02$. Because group membership was the only independent variable, univariate model statistics are identical to group membership statistics within the model.

and can be interpreted as such. For the Important variable, students agreed more with the statement than faculty. For the Class Size variable, students perceived larger classes to have more of a decline in attendance than faculty perceived. For the other four significant variables, faculty agreed more with the statements than students. Faculty perceived student absence to result in lower course grades, lower exam scores, and less learning (both variables) than students did.

C. Own attendance analyses.

Overall, student participants reported that they were no more or less likely to attend class for the class period immediately following an exam (56.1%), with 18.5% reporting they were less or significantly less likely to attend and 25.4% reporting that they were more or significantly more likely to attend. To explore potential influences of perceptions on own post-exam attendance, a 5 (Important) x 5 (Effort) x 5 (Grades) x 5 (Course Learning) x 5 (Exam) x 5 (Less Learning) univariate ANOVA was conducted with students' own post-exam attendance as the dependent variable. The model was significant, $F(24, 326) = 2.35, p < 0.001$, partial $\eta^2 = 0.15$, but the only independent variable to emerge as significant was Grades, $F(4, 326) = 3.46$, partial $\eta^2 = 0.04$. Sheffe post hoc analyses revealed significant differences between those who were neutral to the statement ($M = 2.75, SD = 0.91$) and those who agreed ($M = 3.26, SD = 0.89$), $p < 0.05$, Cohen's $d = 0.57$ and who strongly agreed ($M = 3.38, SD = 0.98$), $p < 0.01$, Cohen's $d = 0.66$.

Table 2. Correlations and Descriptive Statistics for Perception Variables (N = 446).

Variable							Faculty (N = 109)		Students (N = 377)		Cohen's <i>d</i>
	1	2	3	4	5	6	<i>M</i>	<i>SE</i>	<i>M</i>	<i>SE</i>	
1. Important	—						2.72	0.11	3.43	0.06	0.66
2. Effort	0.44***	—					3.10	0.11	3.32	0.06	—
3. Grades	-0.01	0.06	—				4.22	0.11	3.90	0.05	0.32
4. Course learning	-0.08	0.03	0.48***	—			4.11	0.10	3.61	0.05	0.49
5. Exam	-0.15**	0.03	0.31***	0.39***	—		3.63	0.10	2.78	0.05	0.86
6. Less learning	-0.14**	-0.03	0.32***	0.48***	0.61***	—	4.01	0.10	3.15	0.05	0.92
7. Class size	0.14**	0.01	0.16**	0.05	0.03	0.05	3.75	0.10	4.12	0.05	0.38

Note. Cohen's *d* represents effect size of the difference between the faculty and student groups.

** $p < 0.01$, * $p < 0.001$

D. Qualitative analyses.

Faculty and student responses to qualitative questions (4,850 total) were entered into the NVIVO software program for analysis. The qualitative evaluation included actual statements and their total number and percentage for each category. To allow for a comprehensive organization of data and recognition of common themes emerged, one author identified the common categories for each question separately for faculty responses and student responses. If a statement fit into multiple categories, it was assigned to multiple categories. An “other” category was created for statements that could not be placed into the emerged categories and/or could not form stand alone categories. A subset of 10% of the responses (485) were blindly recoded by another author. Interrater reliability, as measured by percent agreement, was 96.70%. Comparative analyses between faculty and students are presented for the first three common questions, but not Question 5 because the response rate was less than 25% for that question. For the additional faculty question regarding strategies for encouraging attendance [Question 4], results are presented in the context of student perceptions of factors that influence attendance (i.e., are the strategies that faculty use perceived as effective by students?).

Faculty and students had overlapping responses for all three common questions. When asked “What comes to mind when you hear post-exam attendance?”, the top 3 issues identified by both 68% of the faculty and 65% of the students were (1) day after exam, (2) low attendance or fewer students, and (3) exam results or test review. Some faculty, however, saw no difference in their class attendance (3%). Four percent (4%) of the students felt there was no need to attend class the day after the exam, with an equal percent feeling that the day after an exam is an opportunity to obtain extra points. Only 3% of the students viewed this day as just another class period with an equal number of students feeling like they needed a rest after an exam. Student comments included “I want to see my test and find out what I got wrong so I can learn it”, “Low attendance because most students think that only an exam review will be done in class and that isn't influential in learning.”, “I think of it as any other day it doesn't matter if it is pre-exam attendance or post-exam attendance they are the same days to me”.

When asked “What factors do you think affect student post-exam attendance?”, faculty and students identified three common issues: (1) test results and review, (2) importance of the material to be covered, and (3) tiredness. Other factors reported by students included focusing on other classes or upcoming exams, laziness, and class size. Faculty comments included, “They think nothing important will happen. It is an excuse to cut class”, “Lack of motivation and interest in course material. [There is an] inability to take responsibility for their own education” and “[Students assume] they accomplished something and can take a breather.” Student responses included “They will have plenty of time to get the missed material before the next exam”, and “If a student thinks they put a lot of effort into studying for the exam they might think they are entitled to a period of rest before putting more effort into that class again”.

Other factors influencing a potential reduction in attendance after an exam identified by faculty but not students included immaturity and irresponsibility. Students identified factors such as length of time before next exam, difficulty of class or test, being influenced by the attitude or interest towards the teacher, credit/points offered, and stress and anxiety as important components influencing attendance at post-exam periods. The faculty comment “immaturity, lack of understanding the relationship of attendance and keeping up-to-date” which is absent from student responses emphasizes that some students may fail to recognize the documented connection between attendance and performance in the class. In addition, students may

misunderstand the intent of testing and see the subsequent class as irrelevant if the test is going to be reviewed according to the student comment of “[The teacher] usually just go[es] over exam and its [sic] already taken so there is no chance to help your grade. The only thing done after that is to introduce what will be talked about for the next few weeks”. Test review is viewed as unimportant since the outcome of the exam is already set.

When asked “How does it make you feel when class attendance in your courses for the class period immediately following an exam is lower than on other non-exam days?” the faculty and students shared one perception – a lack of concern about the issue. However, this perception was far more common among students (53%) than faculty (14%). Unique issues identified by faculty included: (a) negative feelings such as disappointment, frustration and irritation (34%), and (b) students are not interested in learning (6%). Unique faculty responses included, “Irritated! This is actually one of the more important days to attend because it's the intro to a new topic”, “A combination of sad, glad, and resigned. Sad because my own statistics indicate that students with poor attendance will dominate my D's and F's; glad that those who want to learn are in class, and resigned to the fact that those who simply come to college to party will be gone in a couple of semesters, making way for someone who might want to learn and develop intellectually”.

Unique issues identified by students included: (a) deserving points for attending (5%), e.g., “Makes me wish I had not came to class if there is no reward for coming or no punishment for not coming”, “I feel that I deserve extra credit for perfect attendance”, and “Like I should get something for being there”; (b) focusing on self (15% students), e.g., “It makes me feel better about myself”, “I don't really care. I'm there to learn for myself, not others”, and “As long as I am there it doesn't bother me”; (c) loss to those who don't attend (5% students), e.g., “it doesn't effect [sic] me any because I always attend class... I am not missing out on learning anything, those skipping out on class are”; and (d) wish they did not come (3% students), e.g., “Wish I hadn't come”, “Makes you wonder why you came”, and “Makes me wish I hadn't come b/c most of the time the material covered is stuff from a book that I can read at home on my own time and not information found outside the book”.

In response to the question, “What do you do in your course to encourage attendance for the class period immediately following an exam?”, over one-quarter of the faculty respondents (28%) indicated that they do not implement actions to specifically encourage post-exam attendance. Twenty percent (20%) implement action through an attendance policy. However, only 6% of students considered attendance policies to be an influencing factor on post-exam attendance. Seventeen percent (17%) of faculty reported reviewing and returning the exam. Student responses to the prior question suggested mixed feelings about this strategy. Some students are encouraged by exam review as elucidated by the student comment “Many think that reviewing for an old exam has nothing to do with doing better on future exams. However the more devoted students will generally attend class regardless”. Twenty-seven percent (27%) of students associated assignments, finding out grades, and reviewing the exam as relevant to attendance. However, other students were discouraged by exam review. These students commented that “Most classes review exam the next class and a lot of people don't care to review the exam. Some people know after an exam that there won't be anything to [sic] important to hear in class the next meeting.”, “What the professor does on days after tests. If it is just a review that day, students will be less likely to come than if they were to be learning new material.”, and “[Students] need a break from the material after studying. Some students who

know they did well on the test will not come to the next class because they know it will be a review of material already known.”

IV. Discussion.

This investigation used an online mixed-methods survey to explore faculty and student perceptions of course attendance for the class period immediately following a course examination. It sought to address three key gaps in the prior literature on this subject: 1. Which factors influence overall perceived absence for that class period?, 2. How similar or dissimilar are faculty and student beliefs about the causes of absence for that class period?, 3. How are student beliefs about the causes of absence related to their own attendance for that class period?

The first hypothesis, that perceived post-exam attendance would be influenced by course level, course size, motivation for taking the course, attendance policy, post-exam day curriculum, and group membership, was largely unsupported. Although a significant effect emerged for class size on perceptions of post-exam attendance, with a smaller decrease in attendance present in courses under 25 students compared to courses with 176-200 and 201-225 students, none of the other variables were significant. These results seem to suggest that perceived post-exam absence is relatively evenly distributed across university courses (i.e., students and faculty are equally likely to see a decline in attendance in every one of their courses, regardless of structural differences between them). Although these results seem to contradict some prior findings on general attendance patterns, such as differences based on attendance requirements (Friedman et al., 2001; Gump, 2004; Marburger, 2006), they are consistent with others, such as an increase in absences in larger classes (Griedman et al., 2001; Marburger, 2001). Overall, these results are consistent with Moore et al.'s (2008) data that 60% of student absences are related to low intrinsic motivation that have nothing to do with structural factors such as post-exam day curriculum or course level (i.e., if a student skips class because she is “too tired,” she would be too tired for any class, regardless of level or attendance policy).

Qualitative analyses also supported Moore et al.'s (2008) contention, with student tiredness identified as a factor influencing post-exam attendance by both faculty and staff. However, qualitative analyses also indicated that both faculty and students perceived post-exam day curriculum to be an important potential factor in post-exam attendance, and students perceived class size to be influential. That these factors were perceived to be influential, but not found to be statistically significant influences on perceived post-exam attendance in the quantitative analyses, suggests a substantial disconnect between perception and reality. According to the respondent answers, the factors faculty and students thought would affect post-exam attendance did not actually influence it at all.

It should also be noted that one potential reason for the apparent contradiction between these results and some of those reported in the prior literature may have to do with a methodological difference between investigations. In all of the literature reviewed here, attendance was assessed either via student self-report or instructor records. In this investigation, participants were asked to report their *perception* of *overall* classroom attendance for the period. A perceived decline in attendance could have some of the same effects on faculty and students as an actual decline, such as a drop in student and faculty morale (Brown, 2002), because in a symbolic interactionist sense, perception is reality to the perceiver (Gilovich, 1991; Goffman, 1959; Stryker and Burke, 2000). However, future research should attempt to replicate these results using actual attendance records for the post-exam period in order to conclusively evaluate

the nature of these relationships. It is also a possibility that although structural factors influence individual students' general attendance, they do not exert significant influence on most students' post-exam attendance specifically.

The second hypothesis, that there would be significant differences in student and faculty perceptions of student attitudes about attendance, was supported with the exception of the Effort question. Student and faculty agreement with the statements was significantly different. Students were more likely than faculty to endorse statements about the importance of the material and the impact of class size. Faculty were more likely than students to endorse statements about effects on grades, exam performance, and learning. These results are entirely consistent with Perry's (1988) and Moore et al.'s (2008) findings that students and faculty bring significantly different beliefs and values to the college classroom. Students in this sample were more likely to attribute students' absences to factors that were self-serving to students, such as class size (e.g., "I won't be missed or noticed.") or the belief that nothing important would be covered in their absence, so they could afford to miss class. Not surprisingly, faculty were less likely to endorse these statements in an equally self-serving fashion (e.g., if everything they cover is important, why would they think that students wouldn't see it that way?). The same pattern appeared in the four statements faculty were more likely to endorse: faculty saw student attendance as related to both student performance (grades and exams) and student learning (both variables), consistent with both prior research (Perry, 1988) and faculty discourse (much_metta, 2008). Students were less likely to endorse all four statements, again in a self-serving, cognitive dissonance-reducing fashion. That is, student absence could only be justified (and benign), if it had no effect on student performance or learning. Therefore, it is not surprising to find that students were less likely to endorse statements that would contradict those beliefs.

This disconnect between faculty and student perceptions of student attitudes about attendance was also evidenced in the qualitative data. Faculty uniquely identified student immaturity and lack of responsibility as potential factors influencing post-exam attendance whereas students uniquely identified their attitude towards the teacher, length of time until the next exam, and stress/anxiety.

The third hypothesis, that student perceptions would be related to their own post-exam attendance, was partially supported. Although only one perception variable emerged as a significant predictor [Grades], students who agreed with the statement that attendance influences grades were less likely to cut class after an exam than those who were neutral to the statement. This is consistent with the interpretation presented above for the second hypothesis. Likewise, qualitative data indirectly supported this contention, with students reporting that by attending post-exam periods, they are not missing material that their absent classmates are or that in the absence of rewards for attendance/punishments for absences they are less likely to attend class.

A. Limitations.

This investigation assessed the major predictors suggested by both anecdotal ad hoc explanations and empirical research on other forms of class attendance, but other important predictors may yet be discovered. It is possible that other as yet unknown factors may predict post-exam attendance, and future research should continue to explore this possibility. Additionally, the sample used in this investigation reflected only a small percentage of the faculty and undergraduate students at the institution. However, it was substantially larger than is typical for SoTL investigations of this kind (Myers, 2008; Stucky, 2008; Young and Fry, 2008;

Walker, 2008). Further, the methodology used did not allow for the determination of the student response rate, nor any information on how representative the sample was of the student body as a whole. Although it is possible that students in the sample represented a unique subset that did not reflect the general sentiment of the student body, we believe that it is not unreasonable to assume that the students in our sample adequately represented the population from which they were drawn. The researchers in this investigation and other participating faculty who announced the survey to students represented a diverse range of disciplines and the fact that many of the courses in which the survey was announced to students were general education/non-major courses suggests that a broad range of students may have known about and participated in the survey. However, readers should exercise caution in generalizing the results of this single investigation to all college students at all institutions.

B. Implications for Practice and Future Research.

Clearly, faculty and students approach post-exam attendance from very different perspectives. A better understanding of these differences is necessary to bridge this gap. Faculty need to better communicate to students the importance of attendance and its relationship to learning and class performance. The fact that students were four times more likely than faculty (53% vs. 14%) to see poor post-exam attendance as an issue unworthy of concern only highlights the enormity of the gap between student and faculty perceptions. Further, faculty need to understand that structural factors within their control such as attendance policy and post-exam day curriculum have comparatively little influence on post-exam attendance next to intrinsic student factors such as motivation. This last point is particularly important, as over one-third of faculty identified those two specific strategies as ways to increase attendance, but neither of those factors emerged as significant quantitative predictors of perceived post-exam attendance. The results of this investigation suggest that the most effective way to influence student attendance may not be a structural carrot-and-stick approach, contrary to what both faculty and students commonly perceive to be effective, but rather, an interpersonal one. Faculty need not only to better communicate the importance of attendance, but also to better intrinsically motivate students to attend (Gump, 2004). It is even possible that the structural approach could be counterproductive, with students perceiving instructors who use it as autocratic and not personable, thus inhibiting the development of intrinsic motivation to attend. Future investigations could compare structural approaches with interpersonal ones to examine this possibility and the potential of interpersonal approaches to influence student attendance.

This preliminary investigation has explored relationships between the variables thought to influence post-exam attendance. These results should be replicated and re-validated with a representative sample of undergraduate students. Further, that research should explicitly test those variables as predictors of students' own post-exam attendance. Additionally, it should continue to tease apart the roles of both perception (perceived decline in attendance) and reality (actual attendance records) on faculty and student attitudes and behaviors. There is great opportunity here for potentially low-cost big-return strategies. For example, if the perception of a decline in attendance is artificial (e.g., student attendance the class before and the class after an exam are actually the same), a simple practical solution would be to correct the misperception among both faculty and students by recording actual attendance. If the perception of a decline in attendance contributes to low faculty morale, and faculty perceptions are inaccurate and can be corrected, morale should theoretically improve.

Appendix 1: Project Measures

Demographic Questions

1. Please indicate your gender:
 - a. Male
 - b. Female

2. Please indicate your ethnicity:
 - a. White
 - b. African-American
 - c. Hispanic
 - d. Asian
 - e. Other

3. Please indicate your College: [faculty only]
 - a. COBA
 - b. COE
 - c. CHHS
 - d. CIT
 - e. CLASS
 - f. COST

Course Questions

Think of one of the undergraduate courses you [teach/are taking] this semester when answering the following questions. The course you select must use exams as a form of assessment of student learning. Be sure to think only of this course when answering the questions in this section.

1. What level is the course you have selected? [Course Level]
 - a. 1000 level
 - b. 2000 level
 - c. 3000 level
 - d. 4000 level

2. Which of the following most accurately describes why the majority of students enrolled in this course take it? [Reason for Taking]
 - a. The course is in university Core and is specifically required
 - b. The course is in university Core and is a choice among several
 - c. The course is specifically required for a major or program
 - d. The course is a choice among several for a major or program
 - e. The course is an elective

3. Which of the following most accurately describes the size of this course? [Class Size]
 - a. Fewer than 25
 - b. 26-50
 - c. 51-75
 - d. 76-100
 - e. 101-125
 - f. 126-150
 - g. 151-175
 - h. 176-200
 - i. 201-225
 - j. 226-250
 - k. Over 250

4. Which of the following most accurately describes what you typically do during the class period immediately following an exam in this course? [Post-exam Day Curriculum]
 - a. Continue with course content with no review of the exam
 - b. Review a few items from the exam, then continue with course content
 - c. Review the full exam
 - d. Other _____

5. Which of the following most accurately describes the class attendance policy for this course? [Attendance Policy]
 - a. Attendance is required every day and students receive points for attendance
 - b. Attendance is required every day and students lose points for absence (but receive no points for attendance)
 - c. Attendance is required some days, but not others, and students receive points for attendance on those days
 - d. Attendance is required some days, but not others, and students lose points for absence (but receive no points for attendance) on those days
 - e. Attendance is not required, but students may lose points for any classwork that day
 - f. Attendance is not required and there is no direct effect on students' grades
 - g. Other _____

6. On average, how is class attendance in this course for the class period immediately following an exam? [Post-exam Attendance]
 - a. It is significantly lower than other non-exam days
 - b. It is slightly lower than other non-exam days
 - c. It is about the same as other non-exam days
 - d. It is slightly higher than other non-exam days
 - e. It is significantly higher than other non-exam days

Perception Questions

Now think about all courses more generally. Please state how much you agree or disagree with each of the following statements:

1. “Students are less likely to attend the class period immediately following an exam *because* they think nothing important will be covered *that period.*” [Important]

Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1	2	3	4	5

2. “Students are less likely to attend the class period immediately following an exam *because* they think they don’t need to put much effort into the course until closer to the next exam.” [Effort]

Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1	2	3	4	5

3. “Student attendance is related to the grades a student will get in a course, even in courses where attendance is not taken.” [Grades]

Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1	2	3	4	5

4. “Student attendance is related to how much a student will learn in a course.” [Course Learning]

Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1	2	3	4	5

5. “Missing the class period the day after an exam will make it more difficult for a student to do well on the next exam.” [Exam]

Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1	2	3	4	5

6. “Missing the class period the day after an exam will result in less student learning.” [Less Learning]

Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1	2	3	4	5

7. How do you think class size affects attendance in a course for the class period immediately after an exam? [Class Size]

Small classes are significantly more likely to see a decline in attendance	Small classes are slightly more likely to see a decline in attendance	Class size makes no difference	Large classes are slightly more likely to see a decline in attendance	Large classes are significantly more likely to see a decline in attendance
1	2	3	4	5

8. On average, how likely are you to go to class for the class period immediately following an exam compared to other non-exam days in that course? [Own Attendance, students only]

Significantly less likely to go	Slightly less likely to go	No more or less likely to go	Slightly more likely to go	Significantly more likely to go
1	2	3	4	5

Qualitative Questions

1. What comes to mind when you hear the words “post-exam attendance”?
2. What factors do you think affect student post-exam attendance?
3. What do you do in your course to encourage attendance for the class period immediately following an exam? [faculty only]
4. How does it make you feel when class attendance in your courses for the class period immediately following an exam is lower than on other non-exam days?
5. Any other comments?

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