Does the First Week of Class Matter? A Quasi-Experimental Investigation of Student Satisfaction

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Teaching experts suggest that establishing clear expectations and a supportive environment at the beginning of a college course has a lasting impact on student attitudes. However, minimal empirical evidence exists to support these suggestions. Consequently, we randomly assigned instructors to either begin their course with a reciprocal interview activity aimed at these goals or in their typical fashion. At term’s end, students experiencing the activity (n = 187) reported greater clarity regarding their course responsibilities, more support from their instructor, and greater course satisfaction on both official evaluations and experimenter-administered measures, compared to students who had not (n = 190). These results contribute to a converging body of evidence regarding the effectiveness of reciprocal interviews and similar activities generally.

Teaching experts frequently assert that the first days of a college course have a long-lasting impact on the classroom environment and student attitudes. Wilson and Wilson (2007) were the first to empirically examine the effect of the first day of class on students’ subsequent course evaluations and grades. Students who experienced a positive first day (i.e., a 15-min video of a friendly instructor who dismissed class early) reported more positive perceptions of the professor and more motivation for the course compared to those students who experienced a negative first day (i.e., a boring videotaped instructor who used all class time and assigned homework). The motivation differences persisted, and positive condition students had higher grades at term’s end.

This innovative study suggests that the long-held belief in the importance of the first day of class is appropriate. More specific guidance is needed, however, regarding how instructors can effectively establish a positive and productive environment. It remains unclear, for example, whether Wilson and Wilson’s (2007) findings resulted from the differences in instructor warmth, homework assigned, or how class time was utilized. They crafted their positive and negative sessions based on students’ stated preferences, but there is little evidence connecting these preferences to student satisfaction and other outcomes. Moreover, there is great variability in the content and form of first-day activities. Although there is some evidence that students dislike icebreakers (Henslee, Burgess, & Buskist, 2006), some ice-breaking activities might be more effective than others. Thus, it is important
to investigate what specific activities create favorable environments.

Common expert suggestions for establishing a positive and productive learning environment include both making instructor course expectations clear (Caran & Damour, 2000; Davis, 1993) and creating a dynamic and supportive classroom community (Lucas, 2009; McKenzie & Swinicki, 2006; Royse, 2001). To accomplish these goals, Hermann and Foster (2008) proposed a reciprocal student–instructor interview activity, adapted from organizational psychology textbooks (Harvey & Brown, 2000; Osland, Kolb, & Rubin, 2000), in which the instructor solicits information from the students and the students then collectively ask questions of the instructor. In addition to clarifying course expectations, the interview aims to make students more comfortable interacting with the instructor and each other.

Two studies have explored the immediate impact of reciprocal student–instructor interviews (Case et al., 2006; Hermann & Foster, 2008). Among the findings, students reported that (a) they enjoyed the activity; (b) the activity clarified the instructor’s expectations; and (c) they felt more comfortable participating in class and interacting with the instructor. To date, however, no research has demonstrated the long-term impact of this or any other first-week activity. Given the favorable responses observed in previous studies, we predicted that students who had experienced the interview would be more satisfied with the course at the end of the term than students who had not. Second, given the activity’s main goals, we hypothesized that student perceptions of instructor support and expectation clarity should also be greater for those experiencing the activity and that these variables should account for a significant portion of the activity’s effect on satisfaction. To answer these questions, we used a quasi-experimental design and randomly assigned 16 sections of introductory psychology students to experience the activity or not and then assessed outcomes at the end of the 15-week term.

Method

Participants

Participants were 377 undergraduate students (age M = 19.8 years, SD = 1.8 years; 56% female) enrolled in 16 sections of introductory psychology at a large Western university. Ten graduate teaching assistants taught 16 sections. Seven of the sections met twice weekly for 80 min over a 15-week term, whereas the remaining met three times weekly for 50 min. Instructors (and hence their students) were randomly assigned to an activity (n = 187) or no activity condition (n = 190). The instructors were relatively inexperienced (M = 1.6 semesters prior teaching, mode = 2), and prior experience did not differ between groups, p > .40.

Measures

Clarity and supportiveness. These measures assessed the degree to which students had come to expect particular behaviors from their instructor at the end of the term. Students rated the degree to which the instructor communicated specifically and unambiguously regarding course expectations on five clarity items (e.g., “I expect from my instructor that he or she . . . specifically describes the evaluation criteria in this course”). Likewise, they rated the degree to which the instructor supported and appreciated student effort on five supportiveness items (e.g., “treats me as a person, not a number”). All items were assessed using a 5-point response range from -2 (entirely disagree) to 2 (entirely agree). Both scales yielded adequate internal reliabilities (α = .84 and .88, respectively).

Satisfaction with course. Participants also indicated their “overall satisfaction with this course” on a single item using a 2-point scale of -3 (very dissatisfied) to 3 (very satisfied). We also collected mean ratings for all 16 items on the official university student evaluations of instruction for each section, which were rated on a 5-point scale of 1 (strongly disagree) to 5 (strongly agree). We were particularly interested in course satisfaction and the activity’s goals of clear expectation and establishing dialogue (see Table 1).

Procedure

Instructor training. During the week before classes, each group of instructors participated in separate orientation sessions. Both groups were instructed to conduct a typical first day (i.e., syllabus overview, brief icebreaker, brief introduction to course material) and the experimental condition was also given instructions on conducting the reciprocal interview activity. To keep instructors blind to the study’s purpose, all were asked not to speak with other instructors about the study until it was completed.1 All instructors were informed of the importance of student perceptions and expectations and that these perceptions could be measured. All sections used the same textbook, were required to cover certain content, and gave similar assignments.

Activity. Students participating in the reciprocal interview activity formed small groups of 5 or 6 and had approximately 10 to 15 min to discuss several course-related issues. The instructors explained that the discussion was preparation for an interview, and each group selected a representative to field the instructors’ questions and represent their group’s responses. Guided by a handout, the groups discussed a range of topics including expectations, goals, and experiences related to the course; suggestions for classroom norms; and instructor behaviors that could help them achieve their goals. Immediately afterward, the instructors interviewed the group representatives in the presence of the class. Instructors conveyed interest by taking notes (on blackboard or notebook) and by asking clarifying questions.

Immediately after the instructor interview, the groups were asked to elect new representatives to interview the instructor on the group’s behalf. The groups were given 5 to 10 min to agree on several questions, guided by topics on the handout (e.g., the instructor’s expectations, evaluation practices). Students were encouraged to ask any question related to the course. When responding, instructors answered thoughtfully and sincerely and promised to return to issues if they needed additional time. This also provided opportunities to cover important issues that had not yet been addressed, like the challenging course aspects or the ways to get assistance with course material.

During the last week of the course, research assistants administered the dependent measures to all students. After the term ended, the researchers collected official course evaluation summaries from each section.

Results and Discussion

We assessed differences between the experimental and control groups using MANOVA on the measures collected at term’s end. First, we analyzed mean ratings from each section (N = 16) to examine differences on the university evaluation items. Second, we examined mean differences on the ratings of expectations of clarity, supportiveness, and satisfaction that we administered to students individually.

University-Administered Measures

As Table 1 displays, on the university evaluations, sections that experienced the activity reported more favorable attitudes about the course. For example, activity sections rated the course as a more valuable learning experience (M = 4.55, SD = .27) than the nonactivity sections (M = 4.11, SD = .36), F(1, 14) = 8.59, p = .01, d = 1.20. Likewise, activity sections perceived that...
Table 1. Effects of Experimental Condition on University- and Experimenter-Administered Measures

<table>
<thead>
<tr>
<th>Items and Source</th>
<th>Activity Condition</th>
<th>No Activity Condition</th>
<th>Cohen’s d</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>$M$</td>
<td>$SD$</td>
<td>$M$</td>
</tr>
<tr>
<td>University items</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall this course was a valuable learning experience.</td>
<td>4.55</td>
<td>0.27</td>
<td>4.12</td>
</tr>
<tr>
<td>The instructor welcomed and encouraged questions and comments.</td>
<td>4.81</td>
<td>0.10</td>
<td>4.50</td>
</tr>
<tr>
<td>Expectations were clearly stated either verbally or in the syllabus.</td>
<td>4.76</td>
<td>0.10</td>
<td>4.38</td>
</tr>
<tr>
<td>Experimenter items</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expectation clarity</td>
<td>1.21</td>
<td>0.62</td>
<td>1.02</td>
</tr>
<tr>
<td>Supportiveness</td>
<td>1.14</td>
<td>0.64</td>
<td>0.84</td>
</tr>
<tr>
<td>Satisfaction with course</td>
<td>2.31</td>
<td>1.04</td>
<td>1.94</td>
</tr>
</tbody>
</table>

Note. Sample sizes for university items were 8 in each condition and 187 and 190 for the experimenter items (activity and no activity conditions, respectively).

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regarding the importance of the first week of class.

Although it is clear that this activity has a demonstrable
impact on student satisfaction, it remains unclear whether the activity also impacts student
performance. Likewise, although it seems plausible that
better communication of expectations and a more sup-
portive environment could translate into better perfor-
mance, these factors could also lead to objectives in pre-
pinception on the part of the instructor or helper
but less productive students. It also remains unclear
which aspect of the activity is responsible for the ob-
served effects. It could be the instructor’s attention
or the reciprocal exchange that is the key ingredient.
Moreover, it might be that students’ perceptions of
the instructor’s intentions for the activity matter
most. Future research can and should provide more
evidence about whether first-week activities have
the most impact. Likewise, future research can eluci-
date which types of courses benefit from which types
of activities. This study focused on a lecture-oriented
introductory social science course targeted at first-
and second-year students, but it remains unclear if the
activity would have more or less of an impact in smaller,
upper level courses or courses where interaction might
be less common (e.g., history and systems, psychological
psychology).

The reciprocal interview activity explored here
addresses a number of student issues that might also
contribute to a more satisfying experience. Giving
students an early opportunity to meet classmates, re-
quiring early and active participation, and normalizing
concerns through public discussion might all affect
their experiences (see Hennes, et al., 2006). Regardless
of how instructors strive toward these objectives, more
research is needed to gain an empirical understanding
of the mechanisms by which the first days of class
impact long-term course outcomes.

Another intriguing issue raised by the reciprocal
nature of this activity is the degree to which it might
affect instructor behavior and motivation. Like their
students, instructors who use the activity might better
understand others’ perspectives (e.g., concerns, valued
behaviors, goals). As a key component of caring for
others, such understanding could have measurable
effects on student outcomes and evaluations (Teven
& McCoonkey, 1996). Moreover, such caring has been
shown to be related positively to instructor motiva-
tion (Teven, 2007). Although limited empirical work
links instructor motivation to student outcomes,
one study of secondary students demonstrated that
teacher motivation positively predicted future student
achievement, even controlling for baseline achieve-
ment (Knowles, 1999). Thus, the reciprocal interview
might not only provide information helpful in creating
an effective learning environment, but also induce a
stronger commitment to do so. Anecdotal evidence
from this study’s instructors and our own more
seasoned experience suggests that the activity has an
energizing effect. The activity requires the instructor
to think deeply about the learning context and then
creates a direct and lively exchange about those
objectives with a receptive student audience.

Although this study used only relatively new in-
stigators (and the current findings might only apply
to them), the activity can be useful for different rea-
sons depending on the instructor’s level of experience
and how many times he or she has taught the course.
For relatively new courses or instructors, it might ac-
celerate the learning curve about student perspectives
on the course. For instructors with more experience, it
could be a way to gain fresh perspective on and motiva-
tion for a well-worn course. We look forward to future
research that will shed light on the impact of the first
week of class on student satisfaction and achievement
as well as innovative ways to promote clear com-
munication and a supportive environment in the
classroom.

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Although it is clear that this activity has a demonstrable impact on student satisfaction, it remains unclear whether the activity also impacts student performance. Likewise, although it seems plausible that clearer communication of expectations and a more supportive environment could translate into better performance, these factors could also lead to higher expectations on the part of the instructor or happier but less productive students. It also remains unclear which aspect of the activity is responsible for the observed effects. It could be the instructor’s attention or the reciprocal exchange that is the key ingredient. Moreover, it might be that students’ perceptions of the instructor’s intentions for the activity matter most. Future research can and should provide more evidence about which aspect of first-week activities has the most impact. Likewise, future research can elucidate which types of courses benefit from which types of activities. This study focused on a lecture-oriented introductory social science course targeted at first- and second-year students, but it remains unclear if the activity would have more or less of an impact in smaller, upper level courses or courses where interaction might be less common (e.g., history and systems, physiological psychology).

The reciprocal interview activity explored here addresses a number of student issues that might also contribute to a more satisfying experience. Giving students an early opportunity to meet classmates, requiring early and active participation, and normalizing concerns through public discussion might all affect their experiences (see Henslee et al., 2006). Regardless of how instructors strive toward these objectives, more research is needed to gain an empirical understanding of the mechanisms by which the first days of class impact long-term course outcomes.

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Although this study used only relatively new instructors (and the current findings might only apply to them), the activity can be useful for different reasons depending on the instructor’s level of experience and how many times he or she has taught the course. For relatively new courses or instructors, it might accelerate the learning curve about student perspectives on the course. For instructors with more experience, it could be a way to gain fresh perspective on and motivation for a well-worn course. We look forward to future research that will shed light on the impact of the first week of class on student satisfaction and achievement as well as innovative ways to promote clear communication and a supportive environment in the college classroom.

References


Notes

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2. Send correspondence and requests for additional details or clarification about the activity to Anthony D. Hermann, Department of Psychology, Bradley University, 1501 W. Bradley Avenue, Peoria IL 61625; e-mail: aherrmann@bradley.edu.

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Changes in Critical Thinking Skills Following a Course on Science and Pseudoscience: A Quasi-Experimental Study

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We assessed changes in paranormal beliefs and general critical thinking skills among students (n = 23) enrolled in an experimental course designed to teach distinguishing science from pseudoscience and a comparison group of students (n = 50) in an advanced research methods course. On average, both courses were successful in reducing paranormal beliefs and increasing both abstract and psychology-specific critical thinking skills. However, the only difference that emerged between the courses was that the experimental course was superior with regard to reducing specific paranormal beliefs.

Psychologists have recognized the threat of pseudoscience (e.g., Lilienfeld, 1998; McFall, 1991) and have developed teaching methods and content to help psychology students distinguish science from pseudoscience (e.g., Lilienfeld, Lohr, & Motter, 2001; Nummedal & Halpern, 1995). Despite increased attention paid to teaching critical thinking skills in undergraduate psychology courses (e.g., Griggs, Jackson, Marek, & Christopher, 1998; Nummedal & Halpern, 1995), there exists very little empirical support for claims that such interventions are effective (e.g., that focused instruction changes students’ critical thinking skills; Resnick, 1987).

Several quasi-experimental studies have examined the effects of courses designed to enhance psychological critical thinking. Motter and Keeperts (1994) examined changes in paranormal beliefs between students in a science and pseudoscience course, which focused on using the scientific method to evaluate paranormal phenomena, and students in a psychology and law course. At posttest, students in the science and pseudoscience class demonstrated significant reductions in self-reported paranormal beliefs relative to the comparison group. Subsequently, Wesp and Montgomery (1998) examined changes in critical thinking between students enrolled in a paranormal psychology course and those in an intermediate-level psychology course on self-control. Students in the paranormal psychology course showed significant improvement in their ability to evaluate reasoning flaws in scientific articles compared to students taking the comparison course.

Finally, Penningroth, Despain, and Gray (2007) examined changes in critical thinking between students in a psychological science course and those in a general psychology course, as measured by the Psychological Critical Thinking Exam (PCTE; Lawson, 1999). Items on the PCTE present a conclusion and the information on which it is based and ask respondents to explain any problems (e.g., experimenter bias, confusing variables, correlation vs. causation) with the conclusion drawn. Students in the psychological science course showed greater improvement on psychological critical thinking than students enrolled in a general psychology course.

Thus, evidence suggests that psychology courses designed to enhance students’ ability to distinguish science from pseudoscience are superior to comparison courses in decreasing paranormal beliefs (Motter & Keeperts, 1994) and improving critical thinking (Penningroth et al., 2007; Wesp & Montgomery, 1998). Whether changes in paranormal beliefs relate meaningfully to general critical thinking skills is not clear. Also unclear is whether critical thinking skills are best imparted through courses that demonstrate applications of the scientific method to specific pseudoscientific claims, as opposed to courses designed to foster critical thinking through direct instruction in research