Can a Learner-Centered Syllabus Change Students' Perceptions of Student–Professor Rapport and Master Teacher Behaviors?

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There have been few studies assessing students' use and perception of traditional teacher-centered syllabi versus learner-centered syllabi. Therefore, we compared students' perceptions of both teacher-centered and learner-centered syllabi using an experimental design. In the present study, 90 students were randomly assigned to either learner- or teacher-centered syllabi; they rated the faculty authors using well-validated measures of teaching behaviors. Student perceptions of faculty using a learner-centered syllabus were markedly more positive; they rated faculty as more creative, caring, happy, receptive, reliable, and enthusiastic as well as having more student engagement in their class than faculty using a teacher-centered syllabus. Implications for student engagement and learning are discussed.

Keywords: student engagement, learner-centered, syllabi, student perceptions, teacher behavior checklist

Faculty have long perceived syllabi as important to the teaching enterprise. Syllabi provide a road map for the class, motivate students, level the playing field for less prepared students, and lay out the rules to which both faculty and students will be held (Slattery & Carlson, 2005). Because of these important functions of the syllabus, students make significant use of syllabi. For example, most students keep their syllabi and, in one study, almost half used it the day prior to being surveyed, although mostly to identify quiz dates, readings, and homework (Calhoon & Becker, 2008). Further, students preferentially pay attention to some information over other types (Becker & Calhoon, 1999). For example, students tend to focus on the calendar of due dates and grade policies. There are also differences in what elements of the syllabus students focus on based on their level in school. Becker and Calhoon (1999) found that first-semester students focus on syllabus elements such as prerequisite skills, support services, and academic dishonesty policies more than students who were in their second, third, and fourth years. Although what students pay attention to in the syllabus is important, how to construct syllabi, based on best practices, may be of equal or higher importance.

There have been few studies that assess student perceptions of syllabi design. In the few studies that have been conducted, contrary to what many teachers believe, students generally

rate longer and more detailed syllabi more positively than shorter, less detailed syllabi (Saville, Zinn, Brown, & Marchuk, 2010). Students rated faculty providing longer syllabi as possessing more qualities associated with master teaching behaviors and were more likely to report that they would recommend the course to others and take another course from that faculty member (Harrington & Gabert-Quillen, 2015; Saville et al., 2010). Students responding to a more detailed syllabus rated faculty more positively on 12 of 14 questions of the Teacher Behavior Checklist (TBC; e.g., more approachable, more creative, more effective communicator; Keeley, Smith, & Buskist, 2006). Saville and colleagues used the TBC as a measure of teacher effectiveness because it has been demonstrated to predict higher student intrinsic motivation (Komarraju, Musulkin, & Bhattacharya, 2010), and is strongly associated with model teaching (Boysen, Richmond, & Gurung, 2015). Saville et al. (2010) suggested that students may perceive a less detailed syllabus as indicating that the faculty member does not care as much about them and their learning and, further, that they may be underprepared for the course. However, the syllabi that were manipulated in Saville et al.'s study were not developed based on best practices but rather length of description. Therefore, we sought to advance their research by providing a theoretical framework (e.g., learner centered) to design syllabi.

In a more recent study, Harrington and Gabert-Quillen (2015) extended Saville et al.'s (2010) work by varying not only the length of the syllabus (e.g., short, medium, and long) but also by varying the use of images as a way to influence student perceptions of the instructor based on syllabi design. After receiving the syllabus from a hypothetical teacher, students rated them on level of support, caring, helpfulness, willingness to seek help, motivation, interest and a host of other factors regarding the syllabus. They found no differences in perceptions of teachers using either images or no images, but found that the longer the syllabus, the more students perceived the hypothetical teacher as caring and helpful. Students also reported that they would be more willing to seek help and were more motivated from teachers with longer syllabi. No differences in support were reported.

Even though Harrington and Gabert-Quillen (2015) did not specifically investigate professor–student rapport, by proxy they were measuring it. Professor–student rapport is defined as "a relationship of mutual trust and liking" (Wilson, Ryan, & Pugh, 2010, pp. 247–248). Professor-student rapport is thought to establish a positive enjoyable interaction and connection between students and teachers (Gremler & Gwinner, 2000). Strong professor–student rapport has been demonstrated to increase a student's academic performance (Frisby & Martin, 2010), attendance, class participation, and student motivation (Benson, Cohen, & Buskist, 2005; Buskist & Saville, 2004; Wilson et al., 2010). Thus, it is an important variable to measure as it relates to syllabi construction and student perceptions of teaching effectiveness.

Although Harrington and Gabert-Quillen's (2015) study provided additional evidence that syllabi construction can have a profound impact on how students perceive teachers, it was not without its flaws. Namely, the measures of perceptions of teacher behaviors they used were not well established with high reliability and validity. Second, like Saville et al.'s (2010) work, the design of the syllabus was only based on length and use of images, not necessarily on a theoretical framework such as learner-centered theory. In our study, we attempted to advance Harrington and Gabert-Quillen's (2015) work by using well established measures of master teacher behaviors and rapport and to design syllabi using a theoretical framework.

Harnish et al. (2011) described specific aspects of syllabi that may engage students and cause students to perceive faculty as approachable. These attributes included positive or friendly language, rationale for assignments, moderate self-disclosure, humor, compassion, and enthusiasm. The friendly syllabus used more inviting language such as, "I welcome you to contact me . . .," "some of the specific skills I hope you will obtain," "I hope you actively participate in this course. I say this because I found it is the best way to engage you learning the material (and it makes the lectures more fun)" (p. 323). In their experimental study of the effects of syllabi warmth, Harnish and Bridges (2011) reported that faculty providing friendly syllabi were perceived as warmer, more approachable, and more motivated to teach the course than those providing less friendly syl-

labi. Courses with less friendly syllabi were perceived as more difficult. On the other hand, students reading explicit offers of help in syllabi were much more likely to indicate that they would ask for help in response to a range of problems than those syllabi simply encouraging students to keep up with the readings (Perrine, Lisle, & Tucker, 1995).

Learner-centered instruction, which shifts the focus of instruction from the professor's needs to the students', has long been seen as central to effective teaching practices. In a more learner-centered classroom, students determine what they will learn, how they will learn, and how that learning will be assessed. Chickering and Gamson (1987) described seven principles seen as central to such teaching: encouraging faculty/student contacts, developing reciprocity and co-operation among students, using active learning strategies, offering rapid feedback, emphasizing time on task, communicating high expectations, and respecting diverse talents and ways of learning.

As a syllabus is often the first contact a student has with a faculty member, one way to develop a more learner-centered atmosphere is by using a more learner-centered syllabus. Cullen and Harris (2009) proffered a rubric to assess such a syllabus. Table 1 provides the anchors from our modified version of the rubric. Their rubric examined three domains (community, power and control, and evaluation/assessment), each with three to six subcategories. For example, the community domain rated the accessibility of the teacher, communication of the learning rationale, and the degree of collaboration expected. Our review of syllabi at Project Syllabus (*http://teachpsych.org/otrp/syllabi/index.php*) suggested that syllabi posted there, which are accepted based on perceived excellence on a series of criteria that are not explicitly learner centered, were generally rated very high on most learner-centered dimensions (Richmond, Morgan, Slattery, & Venzke, 2013).

Unfortunately, although there are many learner-centered syllabi and descriptions of them, there are fewer data about the impact of a learner-centered syllabus. Students in a class generating rules governing student behavior, for example, rated their faculty member more positively and reported fewer problematic behaviors over the course of the semester than stu-

dents in a class section that received those same rules in their syllabi, but which were attributed to the faculty member (DiClementi & Handelsman, 2005). Nonetheless, descriptions of learner-centeredness (Chickering & Gamson, 1987; Cullen & Harris, 2009) go well beyond generating class rules; most of these strategies have not been empirically studied. In fact, in a review of syllabi at Project Syllabus (*http://teachpsych.org/otrp/syllabi/index.php*), learner-generated rules are relatively infrequent relative to other learner-centered attributes (Richmond et al., 2013). Investigating the impact of generating a learner-focused syllabus may prove to be valuable in improving the perceptions students have of faculty teaching.

Therefore, in the present study, we were interested in understanding how students perceived faculty providing learner- and teacher-centered syllabi. In this study, we sought to advance the research in this area by (a) to an extent, replicating the findings of Saville et al. (2010) and Harrington and Gabert-Quillen (2015); (b) advancing Saville et al.'s (2010) work by adding other known behaviors of master teachers (e.g., professor–student rapport; Wilson & Ryan, 2013); and (c) creating a more reliable and valid learner-centered syllabus based on guidelines delineated by Cullen and Harris (2009). Accordingly, student participants were randomly assigned to receive either a learner- or teacher-centered syllabus. We then assessed the effectiveness of these syllabi in terms of student's perception of faculty behaviors (TBC, Keeley et al., 2006) and rapport with students (Professor–Student Rapport Scale [PSR-S], Wilson & Ryan, 2013). Based on this prior research we posited two hypotheses:

> *Hypothesis 1:* Participants will perceive the instructor who wrote the learner-centered syllabus as having significantly higher master teacher behaviors than participants who receive the teacher-centered syllabus.

> *Hypothesis 2:* Participants will perceive the instructor who wrote the learner-centered syllabus as having significantly higher professor–student rapport than participants who receive a teacher-centered syllabus.

Table 1
Scoring Rubric Assessing Learner-Centeredness and Teacher- Versus Learner-Centered Anchors

Factor	Teacher-centered anchor	Learner-centered anchor
Community		
Accessibility of teacher	Available for prescribed number of office hours only	Multiple means of access and requires interaction
Learning rationale	No rationale provided for assignments or activities	Rationale provided for assignments, activities, methods, is tied to learning outcomes, and policies and procedures are tied to learning outcomes or other rationales
Collaboration	Students are clearly advised that work must be independent	Collaboration required in substantive manner throughout course (e.g., use of groups for class work, team projects, jigsaws, Wikis, peer review, peer instruction, discussion boards, etc.)
Power and control		
Teacher's role	Rules are written as directives	Students participate in developing policies
Student's role	Student is told what he or she is responsible for learning	Students take responsibility for bringing additional knowledge to class via ongoing class discussion or regular presentations
Outside resources	No outside resources other than required text	Independent investigation required, outside learning required, and share outside learning with class
Syllabus tone	Tone of syllabus is punitive	Tone of syllabus is positive, encouraging, and collaborative with students
Syllabus focus	Focus is on policies and procedures; no discussion of learning or outcomes, and tone is more negative	Syllabus weighted toward student learning outcomes and means of assessment, policies are minimal or left to class negotiation, and tone is more positive and learner centered
Evaluation/Assessment		
Grades	Focus on point deduction; grades used to penalize	Grades are tied directly to learning objectives; students have some options for achieving points
Feedback mechanisms	Exam grades only; students are not given other kinds of feedback about performance in course	Periodic feedback mechanisms employed for the explicit purpose of ongoing formative and summative assessment of learning (e.g., quizzes, Muddiest Point, journal discussing project progress, clickers, etc.)
Evaluation	Tests only (not comprehensive)	Multiple means of demonstrating outcomes and both self-evaluation and peer evaluation
Learning outcomes	No outcomes stated	Learning outcomes stated and are explicitly tied to specific evaluation strategies
Revision/Redoing	No rewriting or redoing assignments allowed	Rewriting and redoing assignments encouraged and required

Note. This scoring rubric was modified from Cullen and Harris (2009) and Richmond et al. (2013).

Method

Participants

To assess our hypotheses we recruited 90 introductory psychology students from a large urban state university. Participants completed the experiment for partial course credit. We collected general demographic data for these participants including gender, ethnicity, age, year in university, and so forth. See Table 2 for all demographic data.

Materials, Measures, and Procedure

Participants were randomly assigned to receive either a learner- or teacher-centered syllabus from a hypothetical teacher. Both syllabi were prepared by the same male instructor (one of the authors), and both syllabi were scored on

Table 2
Demographic Data of Sample

Characteristic	f	%
Gender		
Men	40	44.4
Women	47	52.2
Ethnicity		
Caucasian/White	52	57.8
African American/Black	3	3.3
Multiracial/Multicultural	4	4.4
Latino/Hispanic/South American	7	7.8
Asian/Pacific Islander	4	4.4
Level of college education		
Freshman	39	43.3
Sophomore	28	31.1
Junior	17	18.9
Senior	3	3.3
Postbaccalaureate	2	2.2
Median age = 21 years		
GPA (M = 3.14, SD = 0.68)		

Note. GPA = grade point average.

the degree to which the syllabus was teacher or learner centered using Cullen and Harris' (2009) rubric. Specifically, Cullen and Harris devised a rubric which has three main factors that are commonly incorporated into learner-centered syllabi. These factors are community, power and control, and evaluation and assessment. For the community factor, syllabi are scored on subfactors of accessibility of teacher, learning rationale and collaboration (Cullen & Harris, 2009). For example, syllabi are thought to be learner centered if "Collaboration [was] required in [a] substantive manner throughout [the] course (e.g., use of groups for class work, team, projects, jigsaws, Wikis, peer review, discussion boards, etc.)" (p. 123). For the power and control factor, syllabi are scored on the subfactors of teacher's role, student's role, outside resources, and syllabus focus. An example of a learner-centered outside resources subfactor would be "Outside resources included with explanation that students are responsible for learning outside of the classroom and independent investigation." (p. 124). For the evaluation and assessment factor, syllabi are scored on the subfactors of grades, feedback mechanisms, evaluation, learning outcomes, and revision and redoing. As an example of a learner-centered syllabi subfactor of learning outcomes, Cullen and Harris (2009) suggested, "Learning outcomes [are] stated and are tied to specific as-

sessments" (p. 125). See Table 1 for a complete description of the factors and subfactors, including learner- and teacher-centered anchors, of what we used to determine the degree of leaner-centeredness of the syllabi.

In total, there are 12 subfactors that are rated on a 4-point scale: 1 (*teacher centered*) to 4 (*learner centered*). Two trained blind coders rated both syllabi using Cullen and Harris' rubric. They had 97% agreement on all 12 subfactors of the rubric and found that the learner-centered syllabus had an average score of 3.50 (higher scores indicate it was more learner centered) whereas the teacher-centered syllabus had an average score of 1.50. For example, the community subfactor in the learner-centered syllabus was exemplified by the required group work and collaboration in the class. For the power and control subfactor, the learner-centered syllabus described an assignment where students provided a mini lesson in which they are responsible for the class material and content. For a learner-centered assessment and evaluation subfactor, there was a description of how students can "revise and resubmit" their written assignments for an additional 10% increase in grade. See Figure 1 for an illustration comparing the two different syllabi on the subfactor of learning outcomes.

Participants completed the experimental session in small face-to-face groups. In each group, participants were randomly assigned to either the learner or teacher-centered syllabus. After consenting to participate in the study, participants in both conditions were asked to read the syllabus of a hypothetical teacher, and then were asked to complete a five-item quiz on items in the syllabus. Next, all participants were instructed to rate the instructor, who they were told wrote the syllabus, on the 12 selected items from the TBC (Keeley et al., 2006) based on the impression that they got from the syllabus. We chose these 12-items in an attempt to replicate Saville et al.'s (2010) study. The TBC uses a Likert scale from 1 (*never*) to 5 (*always*), where students assess professors on how often the professor exhibits master teaching behaviors (e.g., effective communicator, preparedness, knowledgeable, enthusiastic, flexible/open-minded). In our study, the TBC was reliable at Cronbach's α = .86. Next, all participants were asked to rate the instructor who wrote the syllabus they just read on the 15-item PSR-S (Wil-

I. COURSE GOALS:
   a. Define the content and methodology of educational psychology and child development.
   b. Describe the major milestones of cognitive and social-emotional development.
   c. Identify the special cognitive and linguistic skills necessary for successful learning in the formal instructional setting of the school (learning on-demand, specific memory strategies, classroom discourse, etc.)
   d. Describe and explain the differences between the major theories of cognitive development and learning: Behavioral approach; Piagetian, Vygotskian, and information processing views of learning.
   e. Understand how theories of learning and developmental characteristics of children can be combined to make teaching more effective, and how they influence pacing of content/skills and the choice of appropriate teaching strategies for children so that children can master content standards.
   f. Compare psychological implications of different teaching strategies for children of different backgrounds and developmental levels.
   g. List different assessments measurement strategies and their appropriateness for children of different ages.

(a)

Course Goals and Student Learning Objectives

The major goal of this course is to increase students understanding of educational psychology and child development. Such knowledge will be useful to students as they train to become educators themselves. Meeting the course goal and specific student objectives will be assessed through formal exams (called opportunities), experiential learning activities (ELAs), active reading questions (ARQs), class discussions, and quizzes.

By then end of the course, students should be able to complete the following *Student Learning Objectives*:

1. Define and apply the content and methodology of educational psychology and child development (assessed by quizzes, ARQs, and opportunities).

2. Evaluate and synthesize the major milestones of cognitive and social-emotional development (assessed by quizzes and opportunities).

3. Identify the special cognitive and linguistic skills necessary for successful learning in the formal instructional setting of the school (assessed by ELAs).

4. Describe and explain the differences between the major theories of cognitive development and learning: Behavioral approach; Piagetian, Vygotskian, and information processing views of learning (assessed by quizzes, opportunities, and ELAs).

5. Comprehend and appraise how theories of learning and developmental characteristics of children can be combined to make teaching more effective, and how they influence pacing of content/skills and the choice of appropriate teaching strategies for children so that children can master content standards (assessed by, ARQs, ELAs and opportunities).

(b)

Figure 1. Student learning objectives from the study's (a) teacher-centered syllabus and (b) learner-centered syllabus.

son & Ryan, 2013). In the PSR-S, students rate the level of rapport they have with their professor on a 5-point Likert scale: 1 (*strongly disagree*) to 5 (*strongly agree*). Wilson and Ryan have reported that there are two subscales to the PSR-S. These are the degree to which students are engaged as a result of student teacher interaction (e.g., "My professor encourages questions and comments from students"; Wilson & Ryan, 2013, p. 131), and the perceptions that students have of their teacher (e.g., "My professor is confident"; Wilson & Ryan, 2013, p. 131). The student engagement and the student perceptions of teacher subscales of the PSR-S

were both reliable at Cronbach's α = .86 and .84, respectively. Finally, all participants completed the demographic measure. Participants completed the experiment on average in 45 min.

Results

To investigate differences in how students perceived the two syllabi, 15 independent samples *t* tests were conducted on the 12 TBC Qualities and the Student/Professor Rapport subscales of Student Perceptions and Student Engagement. To control for Type I error, a

Holm–Bonferroni correction was used. See Table 3 for means, standard deviations, and effect sizes.

As illustrated in Table 3, Hypothesis 1 was mainly supported. Students rated the professor of the learner-centered syllabus as possessing significantly higher master teacher behaviors including overall TBC ratings, creative, encouraging and caring, demonstrating enthusiasm, and being happy with a positive attitude. Also as demonstrated in Table 3, Hypothesis 2 was supported by the data in that students who received a learner-centered designed syllabus rated the professor who wrote the syllabus as having significantly higher professor–student rapport in the form of both student engagement and student perceptions of the teacher.

Discussion

As the syllabus is often the first interaction a student has with an instructor, it is important to consider the impact of syllabus construction on student perceptions. The current study examined the impact of two different styles of syllabus construction (i.e., learner centered and teacher centered) on student perceptions of a hypothetical instructor. The investigators

sought to examine student perceptions of both master teacher behaviors (TBC, Keeley et al., 2006) and professor–student rapport (PSR-S; Wilson & Ryan, 2013).

The Effect of a Learner-Centered Syllabus on Master Teacher Behaviors

Consistent with the work of Saville et al. (2010) and Harrington and Gabert-Quillen (2015), syllabus construction had an effect on students' perceptions of master teacher behaviors of a hypothetical instructor as measured by the TBC. In the current study, on average, participants perceived the hypothetical professor writing the learner-centered syllabus as more creative, caring, happy, and enthusiastic, as measured by the TBC (Keeley et al., 2006). Of note, we found that tone and pedagogy primarily influenced relationship and rapport variables rather than perceptions of knowledge and preparedness. Similarly, Saville et al. (2010) found that a more *detailed* syllabus and Harrington and Gabert-Quillen (2015) found that a medium and long syllabus both led to higher ratings of master teacher behavior. However, the current study is the first of its kind to study the impact of a learner-centered syllabus on students' per-

Table 3
Main Analysis of Students' Perceptions of Syllabi

Variables	Learner-centered syllabus M (SD)	Teacher-centered syllabus M (SD)	Effect size d	p value
TBC quality[a]				
TBC total	**4.41 (.55)**	**3.98 (.45)**	**.86**	**<.001**
Approachable/Personable	4.38 (.83)	3.93 (.81)	.55	.012
Creative/Interesting	**4.40 (.86)**	**3.44 (.89)**	**1.10**	**<.001**
Effective communicator	4.49 (.84)	4.36 (.80)	.16	.444
Encouraging/Cares for students	**4.36 (.83)**	**3.76 (.83)**	**.72**	**.001**
Enthusiastic	**4.56 (.76)**	**3.60 (1.12)**	**1.00**	**<.001**
Flexible/Open-minded	3.91 (1.06)	3.31 (1.02)	.58	.008
Happy/Positive attitude	**4.36 (.80)**	**3.71 (.89)**	**.77**	**.001**
Knowledgeable	4.56 (.72)	4.62 (.61)	.04	.639
Prepared	4.67 (.56)	4.47 (.63)	.34	.115
Present current information	4.38 (.72)	4.31 (.63)	.10	.641
Promotes critical thinking	4.44 (.72)	4.16 (.80)	.19	.075
Realistic expectations/fair	4.44 (.81)	4.11 (1.01)	.36	.087
PSR-S[b]				
Perceptions of Teachers	**4.24 (.60)**	**3.86 (.48)**	**.72**	**.002**
Student Engagement	**4.06 (.82)**	**3.58 (.71)**	**.66**	**.004**

Note. TBC = Teacher Behavior Checklist; PSR-S = Professor–Student Rapport Scale. Variables in **bold** have significant differences between the two types of syllabi.
[a] The TBC was rated on a scale of 1 (*never*) to 5 (*always*). [b] The PSR-S was rated on a scale of 1 (*strongly disagree*) to 5 (*strongly agree*).

ceptions of master teacher behaviors. Indeed, rather than focusing on the quantity of details, we focused on changing the "tone" and theoretical pedagogical tenets of the syllabus to be more learner centered based on the work of Cullen and Harris (2009) and Weimer (2013). As such, the learner-centered syllabus focused more on student learning (in contrast to delivery of content), as well as the direct link between student outcomes and assessments. It is compelling that students in our study rated an instructor whom they have never met but who composed a syllabus in a more learner-centered fashion as engaging in more masterful teaching behaviors than the instructor of a teacher-focused syllabus. Perhaps students recognize that faculty writing learner-centered syllabi are doing things that they perceive as especially fostering their learning.

The Effect of a Learner-Centered Syllabus on Professor–Student Rapport

While previous research has found that syllabus construction can impact student perceptions of master teacher behaviors (e.g., Saville et al., 2010), the current study is the first known investigation into how syllabus construction may impact student perceptions of professor/student rapport. Our current findings suggest that a *hypothetical instructor* who reportedly composed a learner-centered syllabus was perceived as having more positive professor student rapport. More specifically, students rated the instructor with the learner-centered syllabus as having significantly more student engagement in their class and was perceived as more receptive, reliable, and fair as measured by the PSR-S (Wilson & Ryan, 2013). Perhaps students recognize that such faculty are engaging in unusual behaviors and going the extra mile for them.

Implications, Limitations, and Future Research

These findings have significant implications for both online and face-to-face instruction. As more instructors make their syllabus available on an online platform (e.g., Moodle, Canvas, Blackboard, etc.) for students to review prior to class beginning, there seems to be an opportunity to positively influence students' percep-

tions of the instructor, and thus set positive expectations for the course. Further, while many instructors in an online format may seek ways to establish rapport and engagement with online learners who they never meet in person, using learner-centered syllabi may be useful to develop positive expectations and rapport. Finally, as the first day of class can have such a profound effect on students' perceptions of the teacher, which persist throughout the course (Wilson & Wilson, 2007), it is extremely important to develop and implement methods to develop rapport with students early. As the results in this study suggest, one possible method may be to design a learner-centered syllabus.

While the experimental design of the current study allows for greater confidence regarding impact of syllabus design on student perceptions, there are several limitations. First, this was one study in a highly controlled and artificial setting. That is, students did not have any interactions with the teacher that could change their perceptions (regardless of the syllabus). As such, we had strong internal validity, but the external validity was not ideal. Nonetheless, Legg and Wilson (2009) reported that students can develop strong perceptions of rapport prior to actually meeting the instructor, which persist throughout the semester. Second, the syllabus was written for a lower division course. In addition, the majority of participants in this study were lower division students. As a result, the findings may not generalize to upper division courses and students. Third, further research is needed to investigate the potential impact on student outcomes based on learner-centered syllabus construction and its relationship to students' perceptions throughout the semester. While the current study did not examine the impact of leaner-centered syllabus construction on student outcomes, positive endorsements on the six-item engagement subscale of the PSR-S (which was higher for the learner centered syllabus) are predictive of several student outcomes including student motivation, amount learned, grades, cognitive learning, and affective learning (Ryan & Wilson, 2014). As such, starting the semester with positive student rapport and engagement may prove helpful in improving student outcomes (Wilson & Wilson, 2007). However, it should be noted that Ryan and Wilson (2014) suggest using the Brief PSR-S as a feedback tool to modify instruction

throughout the semester. Fourth, we did not manipulate or investigate the gender of the instructor, which may influence students' perceptions of faculty. In the present study, students were provided a syllabus written by a male with an androgynous first name. Finally, it is not known what specific aspects of the learner-centered syllabus may have led to changes in student perceptions of master teacher behaviors and learner teacher rapport. It would be beneficial in future research to examine which components of learner-centered syllabi are most salient to students and their perceptions of instructors. Developing experiments that identify what language and/or what parts of the syllabus are most impactful to student perceptions could be valuable to the field of teaching and learning. Future research should address these limitations to further understand the effects that learner-centered syllabi may have on the perception of teachers.

In conclusion, the current study was intended to examine the impact of learner-centered syllabus construction on students' perceptions of instructors. Our findings in the experimental design study extend current research by discovering that learner-centered language in a syllabus leads to increased expectations of master teacher behaviors and professor student rapport. However, if teachers choose to implement changes to their syllabus to make it more learner centered, it is important to note that these philosophical changes should also be made in classroom practices (e.g., implementing learner-centered assessments, instructional formats, feedback, etc.). If this logical next step of implementation is ignored, psychology teachers may be setting up a straw-man for students and in turn may have a profound negative impact on perceived master teacher behaviors and rapport. In other words, practice what you preach!

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