

## Diversity Infusion Project Final Report:

An Update on what we have done and what we will do to understand and ameliorate the causes of the underrepresentation of female-identified students in Philosophy classes at Elon University

What we have done this year:

- Finished the analysis of the focus groups
- Continued to analyze extant data, taking on Ryne Vankrevelen from Mathematics and Statistics
- Continued to collect small survey data from students enrolled in classes and continued to analyze this data
- Held meeting with interested faculty
- Ramped up advertising efforts for our Fall classes

Description:

Working on 4 papers for publication: one on focus groups, one on the surveys and their results, one on the extant data, and one on the student-faculty team.

This was a very busy year for our DIP collegium. The students did the bulk of the work, as they got a late start in analyzing their data because they were not in a position to collect their data (and then transcribe it) until after they learned to do focus groups and arranged for the focus groups. This year, they had to learn how to analyze the data, and that meant a lot of research on their part, and consultations with Alexa Darby (Psychology) and Aunchalee Palmquist (Anthropology). Both were terrific in offering help; but it was really the DIP student partners that did the real heavy lifting, learning the language to describe and the means to analyze the focus groups. This work has been through internal group editing and reviewing, and is very close to being sent out to *Feminist Philosophy Quarterly* for publication.

The analysis of the other data also continued apace. Nim brought Ryne Vankrevelen on board to consult and co-author our research on extant data, which turned out to be a wise move. This both gave us more confidence in the analysis we had been working on, but also offered novel ways to analyze the data. For example, with Ryne's help, we were able to not merely compare female-identified students' grades in philosophy to their overall GPA, but to compare this comparison to the comparison between male-identified students' grades in philosophy with *their* overall GPA, to show that, while female-identified students do, in fact, get higher grades (on average) in philosophy than they have overall, this is not different from the situation with the male-identified students, who also overperform (grade-wise) in philosophy classes when compared to their overall GPA.

In addition, Ann has been collecting more survey data from students enrolled in our classes and analyzing that data. She has turned to Kim Fath in the past, and is revising our findings for publication in consultation with Kim. We believe this would best be sent to *Ergo* for publication.

After trying to find the right venue for an article on why the underrepresentation of female-identified students in undergraduate philosophy programs should be studied by student-faculty collegia, Stephen (and the team) are convinced that the Musing section of *Hypatia* are the right place for it. He has, in that light, been writing a piece making that argument.

In terms of directly trying to increase the number of female-identified students in philosophy, we hosted a conversation with interested faculty (we had about 10), talking about the particular challenges of teaching philosophy in a way that is inclusive, summarizing our research, and offering suggestions for how we—as a campus—and they, as faculty, can encourage students to see philosophy as inclusive (even as the philosophy texts they and we assign might not be). Some of us have also redoubled their efforts to speak their classes and to specific female-identified students in those classes to encourage them to take more philosophy.

Next steps:

- Continue working on the four papers for publication, and then to publish a complete analysis of what our mixed method study reveals (Drafts of each are included as the appendices)
- Continue to monitor course enrollment data (made a little bit easier with the new departmental SAS enrollment tool)
- Continue to do start of semester surveys
- Add a mid-semester survey (which both acts as a feedback loop to learn how our classes are effecting student perceptions and interest in taking more philosophy classes, and as marketing for the classes we do have—as a gentle reminder that we want students to take more philosophy classes and to ask them to consider doing so)
- Where possible, increase the number of “How Should We Live” courses relative to the number of introductory courses we teach

Conclusions:

There are a few overarching conclusions that we have drawn from this project. First and foremost, we have seen no evidence that female-identified students feel treated differently because they are female-identified, and see the classes, as a whole, as worthwhile and worthy of their time and engagement. We therefore feel comfortable recruiting more female-identified students, and in focusing on this recruitment (rather than focusing on changing our courses to avoid some of the gender-based problems that are endemic to philosophy, as a whole; see [“What is it like to be a women in philosophy?”](#) for harrowing examples). Instead, we found the most likely problem to be what Baron, Dougherty and Miller refer to as “pre-university” influences; we recognize that these influences are not only there before students get to Elon, but are also there outside of any class (say, in how philosophers are portrayed in the media) and in non-PHL classes (say, in how philosophers are portrayed in a course on intellectual history). This has three implications: first, that much of what students think about philosophy, and whether they want to take philosophy classes, is determined without our influence;

second, that we should be considering where else on campus they are learning about philosophy and philosophers, and third, that we should be trying to recruit students who might not know anything (or know little about philosophy). We have worked on the latter two of these three (see note about). We also found that, while most students do not take philosophy classes based on the particular professor teaching the class, that faculty “tapping” students and encouraging them to take more philosophy classes does have an important impact for those who do continue on with philosophy classes. We thus need to be sure to do that. Finally, we found from the extant data multiple important things: first, we found that female-identified students get good grades in our classes (better than the male-identified students, and better than their own overall GPAs); second, that some particular courses attract more female-identified students; third, that some particular courses have a higher “recidivism” rate (that is, that a higher percentage of female-identified students who take that particular course will take further courses); third, that one course has both the highest attraction and the highest recidivism rate, and thus, we have good reason to increase the number of sections of that course over other introductory level courses.

One final note: we have found this project both greatly personally and professionally rewarding, and we really appreciate the support CATL has given us, both in terms of the funding and in terms of insight and guidance. Thank you.

## Using Focus Groups to Explore the Underrepresentation of Female-Identified Undergraduate Students in Philosophy

### Abstract

This paper is part of a larger project designed to examine, ameliorate the underrepresentation of female-identified students in the philosophy department at Elon University. The larger project involved a variety of research methods, including statistical analysis of existent registration and grade distribution data from our department as well as the administration of multiple surveys. Here, we report the aspect of our research that focused on conducting and analyzing the data from focus groups. We ran three focus groups of female-identified undergraduate students: one group consisted of students who had taken more than one philosophy course, one consisted of students who had taken only one philosophy course, and one consisted of students who had taken no philosophy courses. After analyzing the results of the focus groups, we find evidence that: (1) taking one philosophy class did not, on its own, ameliorate students' mindsets about philosophy; (2) that professors have a large potential to ameliorate (or reinforce) students' (mis)perceptions of philosophy; and (3) and that students who have not taken philosophy are likely to see their manner of thinking as being at odds with that required by philosophy. We conclude by articulating a series of questions worthy of further study.

### I. Introduction

This paper is part of a larger project designed to examine, address, and ameliorate the underrepresentation of female-identified students in the philosophy department at Elon University.<sup>1,2</sup> Our project was conducted over the course of two years by a research team consisting of three faculty members of the philosophy department and three undergraduate philosophy majors.

Elon University is a private, mid-size (~5,000 students), primarily undergraduate university located near Burlington, North Carolina. Elon's class of 2019 was 19% non-white and has roughly 60% female-identified students and 40% male-identified students (Elon University 2016). Elon has a socioeconomically homogeneous, with only 9% of students receiving need-based Federal Pell grants (Groves 2015a). Additionally, most of the students identify as heterosexual. Elon also has a high percentage of students in fraternities or sororities (~40% of the student body, [*Pendulum* staff 2016]). In our experience, Elon's student body has a very polite

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<sup>1</sup> For more information about our project, procedures, and findings, see [http://www.elon.edu/e-web/academics/elon\\_college/philosophy/DIP.xhtml](http://www.elon.edu/e-web/academics/elon_college/philosophy/DIP.xhtml)

<sup>2</sup> Throughout this paper, we use the term "female-identified." When referencing the work of others, we adopt their terminology (often, the term "women" instead of "female-identified").

culture; students often hesitate to take public positions on issues, and fitting in socially is valued enormously. There is very little activism or student protest (Groves 2015b); further, student activities are closely monitored by university staff -- for instance, all flyers must be submitted by a university-recognized student organization and then approved by university staff (Elon University 2016b).

Our philosophy department is, from what we can tell, atypical of undergraduate philosophy departments in a number of ways. We do not have a graduate program and most of the students who take our courses do not continue on with the subject. Indeed, the vast majority of our philosophy majors do not pursue further philosophy studies in graduate school. Thus, there is less emphasis on teaching “the canon” or the history of philosophy as might be found in typical undergraduate philosophy programs.

A number of our full-time faculty in our department are well versed in and primarily teach the Continental and Anglo-European traditions of philosophy with a particular teaching focus in applied philosophy and applied ethics. Classrooms are often discussion-based learning environments and are limited to approximately 30 students (this is typical of an Elon University classroom). One of our seven full-time faculty members is female-identified. Our department regularly offers courses in feminist theory and one of our seven faculty is a feminist scholar. Our department does not offer logic classes and the major is intentionally designed to allow students to pair their philosophy major with another major or with minors. There are a few required classes in the major; instead students are allowed to tailor their courses to their interests from a variety of offered electives. Many of these electives are upper-level courses which do not have prerequisites.

We began investigating our department as conversations about sexism, misogyny, and the underrepresentation of women sprang up in philosophy departments worldwide (see Baron, Doherty, and Miller 2015 and Goddard, Dodds, and Burns 2008 for explorations of the problem in Australia and Beebee and Saul 2011 for an exploration of the problem in the United Kingdom). That women have been wildly underrepresented in philosophy in the United States at every level above introductory classes is beyond dispute.<sup>3</sup> Paxton, Figdor, and Tiberius (2012) survey 56 PhD institutions and prestigious liberal arts colleges,<sup>4</sup> finding that “the proportion of

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<sup>3</sup> According to the U.S. National Center for Educational Studies, women made up merely 16.6% of all full-time philosophy faculty in the United States in Fall 2003 even as women are more likely to have earned a Bachelor’s degree (U.S. Department of Labor 2016). This is true even as many other disciplines traditionally seen as unwelcoming to women were in better standing than philosophy (Business had 28.2%, Economics had 18%, Mathematics had 37.1%, and Political Science had 20%; U.S. National Center, Table 270).

<sup>4</sup> We include here the number of universities that responded to the request of Paxton et al. (2012) for information. Paxton et al. asked the top liberal arts colleges found by consulting the *U.S. News and World Report* rankings as well as institutions with doctoral programs in philosophy (950-952); we suspect that the surveyed departments have a stronger emphasis on preparing students for professional philosophy than we do at Elon.

females reliably decreases as one moves through each level in the academy, from introductory courses through the faculty population” (2012, 952).<sup>5</sup>

The Elon philosophy department is no exception to this international trend of female underrepresentation. Since there exists no graduate program in Elon’s philosophy department, we were particularly interested in what was happening at the undergraduate level. Moreover, we have good reason to focus on what happens at the undergraduate level because it is within this time period that philosophy loses the largest proportion of female-identified students. More specifically, much of this drop-off occurs between the proportion of female-identified students taking introductory philosophy courses and the proportion of female-identified students majoring in philosophy. Kate Norlock, citing the work of Paxton, Figdor, and Tiberius (2012), calls this the “intro-major cliff” (Norlock 2012, 347). A numerical breakdown of Elon’s “intro-major” cliff from 2011 to 2014 reveals that while our introductory classes are made up of approximately 48% female-identified students, only approximately 38% of our majors identify as female .

Before undertaking efforts to address the underrepresentation of female-identified students in our lower-level classes by recruiting female-identified students, we wanted to ensure that our department was worthy of having female-identified students in our classes. That is, we wanted to make sure that our department was a space where women feel well-served and respected. Thus, although we were ultimately interested in coming up with strategies for recruiting more female-identified students, we were also committed to learning more about the experiences of female-identified students in our department. To achieve these two goals, we first surveyed a large, gender-diverse sample of Elon’s student body about their perceptions of the philosophy department (Cahill et al., in preparation). Using the data we gathered from the survey, we then conducted focus groups with female-identified students,<sup>6</sup> the results of which we discuss in this paper. With these focus groups, we hoped to (1) expand upon what we learned from the survey and (2) find new, more specific, and detailed information that might explain low recruitment and retention of female-identified students that we could not have gleaned from our survey (see page 4).

Additionally, while the literature on the underrepresentation of women in philosophy has been growing in recent years, much of it offers theoretical frameworks to explain the gap (Antony 2012; Calhoun 2009; Dotson 2012; Haslanger 2008) or quantitative evidence (Baron, Dougherty, and Miller 2015; Paxton, Figdor, and Tiberius 2012; Thompson et al. 2016) to explore the severity of the gap. While these approaches are certainly helpful in understanding the nature of the problem, it was our view that we needed qualitative data to deepen our

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<sup>5</sup> For a broader review of the literature on female underrepresentation in philosophy, specifically regarding the two common models (Different Voices and Perfect Storm) for conceptualizing this problem, see Antony 2012.

<sup>6</sup> In fact, we perceived that another benefit of conducting focus groups was that they themselves served to ameliorate the underrepresentation problem. That is, they provided, to the female-identified undergraduate philosophy majors conducting the focus groups, the chance to deeply explore questions about gender and philosophy, and the chance to share some of their knowledge with the female-identified students in the focus groups. The focus groups also educated the female-identified participants regarding issues of gender and philosophy.

departmental data and survey results. This qualitative approach has been taken by one other researcher we could find: Crystal Nicole Lilith Aymelek conducted one-on-one interviews with women who were philosophy majors or had recently graduated with a philosophy major. Her goal was to identify the factors that encouraged them to stick with the subject (Aymelek 2015). Our paper, like Aymelek's, seeks to understand the gender gap "from the perspective of the actual experiences of women in philosophy" (8). Furthermore, since we have found no mention in the literature of focus groups being conducted by other philosophy departments exploring women's underrepresentation, we thought this method of investigation would be especially fruitful and helpful to other philosophy departments as they continue their investigations.<sup>7</sup>

We also found ourselves well-positioned to carry out the focus groups. Our research team consisted of two female-identified undergraduates, one male-identified undergraduate, one female-identified faculty member, and two male-identified faculty members. The two female-identified undergraduates facilitated the focus group discussions. We hypothesized that female-identified students would more openly and honestly share their experiences while talking with their peers, rather than a faculty or staff member.

This paper begins with a description of our methodology, including our strategy for recruiting participants, the structure of our focus groups, some of the questions we asked students, and our method for coding the data. Next, we summarize the results of our coding procedure. Third, we discuss our result in relation to existing literature. We find evidence that 1. taking one philosophy class alone did not ameliorate students' mindsets about philosophy 2. that professors have a large potential to ameliorate (or reinforce) students' perceptions of philosophy and 3. and that students who have not taken philosophy are likely to see their manner of thinking as being at odds with that required by philosophy.

## **II. Methods**

Our focus group methodology was informed by the survey we conducted which was addressed to a gender-diverse sample of Elon's student body (Cahill et al., in preparation). We received 166 completed surveys with 115 respondents who identified as female (69.3%), 46 as male (27.7%), 1 as genderqueer (0.6%), 1 respondent who preferred not to answer (0.6%), and 3 students who did not respond to this question (1.8%). The survey data, to our surprise, did not reveal many significant differences in responses between gender groups or any reports of sexism or misogyny.<sup>8</sup> The data did, however, reveal 3 statistically significant trends in female-identified

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<sup>7</sup> However, we understand that other researchers are currently or have recently conducted focus groups. For instance, Allyson Scott and Sidney Rodgers of Centre College have recently presented their findings from student-led focus groups with female and male undergraduates in order to gauge women's perceptions of philosophy (Scott and Rodgers 2016).

<sup>8</sup> We write "between gender groups" rather than "among gender groups" because we did not receive enough responses from students outside of the female-identified and male-identified categories to analyze them for significance.

students' perceptions of philosophy: 1. Among respondents who had taken one philosophy course, female-identified respondents reported less agreement than male-identified respondents with the following statement: "I believe I can do well in philosophy." 2. Even though female-identified students were less likely to think they could do well in a philosophy course, they reported receiving higher grades on average than their male-identified peers. 3. Among students who had not taken philosophy, female-identified students expressed higher rates of uncertainty than their male-identified peers as to whether philosophy would be interesting to them.

Having analyzed these trends, we were interested to see if any new themes -- or if any themes we expected to see in the surveys but did not see -- would emerge in student-guided conversations with other students. We decided to have our focus groups consist of only female-identified students because we were particularly interested in uncovering new insights into their experiences. Moreover, we felt that female-identified students would be more likely to speak candidly and frankly regarding their gendered experiences in a setting that did not include male-identified students or faculty.

### *Participants*

With the approval of Elon University's Institutional Review Board, we began recruiting participants for targeted focus groups. Participants of our study were self-identified female undergraduate students attending Elon University. We recruited these students by having two female-identified members of our research team ask professors of general education courses for permission to speak to their classes. These classes included students from all levels of undergraduate study. Upon arrival to the classrooms, the two female-identified members of our research team asked the non-female-identified students to exit the room, only targeting the female-identified students. We did this in order to establish a more welcoming, comfortable, and confidential atmosphere for the female-identified students in the classes. We incentivized participation with \$10.00 gift cards to a local coffee shop and promised snacks at the focus groups themselves. We recruited:

1. Five female-identified students who had taken more than one philosophy course or were currently taking their second philosophy course at Elon;
2. Four female-identified students who had taken only one philosophy course or were enrolled in their first philosophy course at Elon; and
3. Three female-identified students who had not taken a philosophy course and were not currently enrolled in a philosophy course at Elon.

While this is a lower participation rate than we had hoped for, the qualitative nature of this study allowed us to proceed; qualitative studies are intended to highlight participant voices, rather than draw statistically significant conclusions about a population (Gibbs 1997).

### *Procedure*



The focus groups were conducted in a space in which we thought students would feel comfortable and willing to engage in a critical discussion about their experiences with philosophy. The space was not a typical classroom setting; rather, it was a large conference table which we all sat around. Moreover, we sought to find a relatively ‘neutral’ space, and therefore carried out these discussions outside of the building which houses the philosophy department. Two undergraduate, female-identified members of our research team conducted the focus groups; one acted as a note-taker while the other facilitated conversation. The note-taker was to take informal notes about the conversation dynamics, especially noting the body language of participants. The focus groups were audio recorded. Each focus group began with an acknowledgement of the recording device and assurance of confidentiality.<sup>9</sup> Afterwards, we set the ground rules for conversation and explained that in certain cases, we might be forced to break confidentiality.<sup>10</sup> The focus groups were semi-structured (Longhurst 2003, 103); though we had specific questions to address, casual conversation around these questions was encouraged. Each focus group lasted between 45 and 90 minutes.

The focus groups began with an introductory activity in which we asked participants to first write down or draw what came to mind when they thought about philosophy, philosophy as a discipline, and philosophers. We asked them to share this information with the group in a short discussion. Next, we engaged them in a “Think, Pair, Share” activity. This is an activity in which participants first respond individually on paper to a set of questions. Next, they discuss their responses with the person next to them. Finally, they share their combined insights with the entire group. This encourages more reserved participants to speak up and allows for a sense of safety because it may not be clear which of the partners had a given opinion (originally developed in Lyman 1981).

Following the “Think, Pair, Share” activity, we facilitated a large group discussion. Some examples of questions we asked include: What are your perceptions of the philosophy department/majors on campus? How do you think one succeeds in philosophy? How did you see gender dynamics play out in your classroom? We first asked questions we thought could be best answered collaboratively; we then transitioned to questions geared towards students’ individual experiences.<sup>11</sup> While we tried to maintain consistency across groups for comparative purposes, we tailored some questions to specific groups.

Students were aware that we were examining questions of gender and philosophy since we informed participants about the general topic of our research during recruitment.

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<sup>9</sup> We assure confidentiality, but not anonymity. Anonymity is impossible to ensure in the focus groups’ face-to-face setting. We were able to ensure confidentiality by redacting identifying information about the participants from the transcriptions.

<sup>10</sup> Specifically, if sexual assault was reported, we would need to follow institutional guidelines and break confidentiality.

<sup>11</sup> For a full list of our questions for each group, [http://www.elon.edu/docs/e-web/academics/elon\\_college/philosophy/Focus\\_Groups.pdf](http://www.elon.edu/docs/e-web/academics/elon_college/philosophy/Focus_Groups.pdf).

Nevertheless, to minimize the effects of priming, we held off any questions explicitly related to gender until the very end of the focus group conversation (for a discussion about how gender priming effects survey results, see Steele and Ambady, 2005). Following the large-group discussion, we asked participants to say or write down any final thoughts they had. Finally, they filled out an exit survey with some demographic information.

### *Data Analysis*

To ensure consistency and confidentiality, one facilitator transcribed the audio recordings while the other redacted the transcripts, taking out identifying information about participants. Further, any identifying information about the professors they mentioned and/or their peers was redacted from the transcripts. To increase the likelihood of confidentiality, the third student researcher on our team (who had not participated in the focus groups) was consulted before sharing the redacted transcripts with the entire research team. In order to analyze the data, we used a methodology that is similar to the modified grounded theory approach (as detailed in Charmaz 2014). In particular, we decided to use an emergent coding scheme, compared across our three coders for consistence, and developed an interpretive framework for analysis.

We began our coding process by developing analysis questions (which are distinct from the questions we asked during the actual focus groups; see the results section for our analysis questions). We then turned to the transcripts, searching for comments made by participants that related to our questions. To make sense of all the comments, we used *in vivo* coding, a qualitative data analysis technique that allows researchers to use participants' own voices to develop codes<sup>12</sup> (short descriptions of ideas present in a single data set; in our case, a single focus group transcript). Codes capture the way data relates to analysis questions (for a more detailed explanation of coding, see Saldaña 2009). For instance, suppose a student made comment X during the focus group. Their comment X would be tagged with code Y, which relates it to analysis questions Z. From these codes, categories and themes are developed through an iterative process involving constant comparison of data and discussion with research team members (Glaser 2002). Categories consist of codes that appear within two data sets (two different focus group transcripts, in our case). Themes are unifying threads that enable the researcher to interpret the data (or categories which appear amongst all three focus group transcripts, in our case).

Two undergraduate members of our research team coded for each question in each focus group transcript using the *in vivo* approach. The researchers independently coded the transcripts using the mixed media analysis software, Dedoose. Key phrases were tagged as codes in Dedoose and the researchers met several times to ensure consistency in their coding.<sup>13</sup> When two coders did not agree on a code or category, they discussed it until they reached agreement.

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<sup>12</sup> While we acknowledge the impossibility of preventing preconceived notions from affecting our data analysis (especially because we are familiar with the literature), we followed the practice of using students' own words to stay closer to the viewpoints presented during the focus groups.

<sup>13</sup> Consistency was defined as each coder having 80% of the same codes as the other coder in each transcript.

### III. Results

We coded our transcripts for each focus group (hereafter FG; see Table 1) for the following three analysis questions:

1. With what mindset do students approach the topic of philosophy?
2. What are students' perceptions of the climate of
  - a. the classroom (professors, students, coursework)?
  - b. the major(s)?
  - c. the department?
  - d. philosophy in general?
3. What are factors (past and present) that influence students' decision to take or not take philosophy?

With our first analysis question, we sought to explore the extent to which students in each FG demonstrated a fixed or growth mindset. Carol Dweck defines a fixed mindset as “believing that your qualities are carved in stone” (Dweck 2006, 6). That is, someone who exhibits a fixed mindset will believe that their qualities, such as doing philosophy well, are the cause of innate genius or a given disposition toward critical thinking, as opposed to a process of learning and practice (and, according to Leslie et al. 2015, we have cause to believe that philosophy in particular is perceived as a discipline for geniuses). In our focus groups, statements that described philosophy and philosophic skills as innate dispositions or abilities were coded as representative of a fixed mindset.

Alternatively, Dweck defines a *growth mindset* as “based on the belief that your basic qualities are things you can cultivate through your efforts” (7). Statements that indicated that philosophy and philosophical skills can be improved were coded as representative of a growth mindset. We were curious about fixed versus growth mindset approaches to philosophy because there is some evidence in the literature to indicate that this is a gendered phenomenon (Buckwalter and Stich 2010, 32; Dweck and Gilliard 1975).<sup>14</sup> That is, female-identified students are more likely to have a fixed mindset about whether they can succeed academically.

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<sup>14</sup> It is worth noting that while the literature finds that women are more likely than men to exhibit a fixed mindset, in this focus group, we could not investigate these differences as we did not interview male-identified students (and the focus group methodology would not allow for such comparisons even if we had). Rather, here, we hope to investigate differences in female-identified students' experience with philosophy in terms of mindset.

While we could not investigate the effects of these gendered perceptions of philosophy, Thomson et al. (2016) speak to this question in their recent paper. Thomson et al. (2016) surveyed undergraduates at Georgia State University following their introductory philosophy course and found that men and women were equally likely to perceive philosophy as a brilliance-based field (i.e. that only a genius can succeed in philosophy, see Leslie et al. 2015). In addition, Thompson et al. (2016) find that students who hold brilliance-based beliefs about philosophy are less likely to identify with philosophy; in particular, they find that these brilliance-based beliefs impact students' sense of belonging and decrease students' willingness to continue taking philosophy courses. Further, this discrepancy is more pronounced among women with brilliance-based beliefs than men with brilliance-based beliefs. We hypothesize that the cause of this difference is that among those students who adopt a fixed mindset (which would

With our second analysis question, we investigated what students thought about the climate of various aspects of philosophy/our department. Haslanger, in a reflection on the culture of philosophy, writes that in her experience, “it is very hard to find a place in philosophy that isn’t actively hostile toward women and minorities, or at least assumes that a successful philosopher should look and act [and talk] like a (traditional, white) man,” and that because of this, “it is difficult for women to feel ‘at home’ in [philosophy’s] hypermasculine environment” (212-217, 2008). Further, as Calhoun (2009) notes, due to conflicting philosopher-woman schemas, it is common to experience a hostile climate in philosophy. Creating such a climate does not require many such instances of sexism since such instances can become classified as normatively representative in students’ minds. Calhoun, writing about her own experience, explains that she “had learned somewhere to read what the bad egg said as representative: not statistically representative, but normatively representative” (220).

With this in mind, we were aiming to hear about students’ perceptions of how (un)welcoming the department was in various ways, but we coded for a broader range of responses depending on what we thought might influence students’ overall perceptions of climate. For example, students in the third FG (students who had never taken philosophy) stated that philosophy as a whole seems difficult and confusing. Though this did not give us explicit evidence of whether or not they found the department welcoming, we did code these remarks as responses to the question about climate since a perception of philosophy as difficult or confusing can contribute to a student feeling like philosophy is not for her.

The third question we coded for gave us insight into the factors relevant in students’ choices to take, not take, or continue taking philosophy. This question interested us because it related to other studies addressing the “intro-major” cliff and retention rates of women in philosophy (Paxton, Figdor, and Tiberius 2012; Norlock 2012). When considering the students who had never taken philosophy, this question gave us insight into the “pre-university effect” (Baron, Dougherty, and Miller 2015). Baron, Dougherty, and Miller (elaborating on Calhoun 2009) understand the “pre-university effect” as an effect of many influences prior to university experience which contribute to a gender schema that makes it hard for women to see themselves as philosophy majors (468). The “pre-university” aspect of this effect is key since it highlights that even though many students do not have formal experience with philosophy prior to enrolling in their university, female-identified students are nevertheless likely to have a perception of themselves as incompatible with philosophy even before entering university. Though “pre-university effects” is how this phenomenon is framed in the literature, we will also be thinking about these effects as extra-philosophic (for a detailed description of what we mean by this, see the discussion section of this paper).

The following analysis will be organized by analysis question. Each analysis question will be subdivided by FG and will end with a cross-FG analysis.

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be necessary to succeed in a field perceived as brilliance based), women are less likely to see themselves as fitting within the genius category. That is, men are more likely than women to see their “fixed” qualities as allowing them to be successful in the brilliance-based field of philosophy.

<b>Focus Group 1</b>	5 female-identified students who had taken <i>more than one</i> philosophy course or were enrolled in their <i>second</i> philosophy course
<b>Focus Group 2</b>	4 female-identified students who had taken <i>only one</i> philosophy course or were enrolled in their <i>first</i> philosophy course
<b>Focus Group 3</b>	3 female-identified students who had taken <i>no</i> philosophy courses

**Table 1: Focus Group Demographic Information**

**Question 1: With what mindset do students approach the topic of philosophy?**

*Question 1, Focus Group 1*

The students of FG 1 frequently expressed growth mindsets; of the 30 total statements coded as mindset statements, 25 (83%) indicated a growth mindset and 5 (17%) indicated a fixed mindset. In many cases, these statements expressed a conception of philosophy as requiring continual learning in order to be successful. For instance, students commented that the “learning never stops really for philosophy,” that you must “continue challenging yourself,” and that if “[you keep asking questions, then] you will succeed.” Students also indicated a belief that they had improved their philosophical skills, in comments such as, “[in Philosophy, I] learned to defend my own positions” and “I’ve had philosophy so I understand the reading.” Likewise, students saw their personal development as connected to their study of philosophy: “[I am] more open to critique and opposing arguments [after having taken philosophy]”; [Philosophy] made me a more thoughtful person.”

Of the 5 instances that students indicated a fixed mindset, most were oriented toward being good at or “having a knack for” philosophy. In 1 of these instances, a student mentioned her professor’s comment that she “had a knack” for philosophy and that she should keep taking philosophy courses. In another case, a student saw her success as inevitable because she saw herself as a “curious person.” Overall, statements such as “anyone can succeed if they put their minds to it” are characteristic of FG 1.

*Question 1, Focus Group 2*

The students of FG 2 expressed a mix of statements that indicated both growth and fixed mindsets. There were 15 statements coded as mindset-related, with 6 (40%) statements coded as growth mindset and 9 (60%) coded as fixed mindset. Regarding growth mindsets, a few statements acknowledged that one could succeed in philosophy if one puts in significant effort (“maybe if I *really* tried [I could succeed at philosophy]”). Other statements alluded to similar sentiments, though the students suggested that their particular conditions made them not want to pursue philosophy (“if I started over... in a lower level class [I could have seen myself continuing with philosophy]”).

The majority of codes for FG 2, however, indicated a fixed mindset. In most cases, the fixed mindset statements were about a student's perceived lack of innate philosophic ability. For instance, one student remarked that she is "just not a person who thinks in that way" whereas another says that she "just [doesn't] tend to think as broadly or challenge critical thoughts as much." These sorts of statements indicated that some people "just" think like philosophers, whereas others do not. On the other hand, there were a few statements made by FG 2 participants that indicated a fixed mindset in favor of their philosophic ability. For instance, one student commented that she was "one of those people who will have discussions about [philosophy] and [she thinks] about it a lot," indicating her predisposition towards philosophic thinking. On the whole, however, students of FG 2 conveyed a pessimistic attitude regarding their prospects for success in philosophy, even as they halfheartedly suggested that philosophy might be something that they could get better at.

### *Question 1, Focus Group 3*

Lastly, the students of FG 3 expressed both fixed and growth mindsets regarding philosophy. Of the 12 statements that were coded as indicative of mindset, 7 were fixed (58%) and 5 were growth (42%). Statements coded as growth mindset generally characterized philosophy as an activity that helps one think more critically or makes one smarter. For instance, one student recalls that when her friends took philosophy, it "really raised [her friends'] critical thinking levels." Another suggests that philosophy would help her "intellectually." Statements that expressed a fixed mindset had varied themes. Some simply commented that they would not succeed in philosophy, noting, "I like logic well enough too, I just don't think I could wrap my head around so many different viewpoints and argue about each one." Others believed that philosophy required a type of thinking that they were simply not "capable" of. Another student had the "impression that maybe [philosophy is] not the right thing" for her.

An interesting distinction between "logical" and "intuitive" thinking emerged in FG 3. In particular, one statement, expressive of a fixed mindset, reads, "[my suitemate] is very logical, which is why philosophy appealed to her [whereas I am more of an intuitive thinker]." Another code, characterized as growth mindset, reveals a similar distinction: "I don't think you'd have to work very hard to do that [persuade me to take philosophy]. I mean, I'm half-convinced to take one at some point, *simply because I want to be smart and be able to use logic rather than intuition*" (emphasis added).

### *Cross-Focus Group Analysis*

Across groups, it seems that the students of FG 1 were more likely to express growth mindsets (83%) than the students of FG 2 (40%) and 3 (42%). In particular, there were noticeably more references made to a certain "type of person" who thinks philosophically in the latter focus groups than the first FG.

### **Question 2: What are students' perceptions of the climate of philosophy?**

### *Question 2, Focus Group 1*

Overall, perceptions of philosophy's climate among participants of FG 1 were quite positive. Students of FG 1 viewed the department and philosophy as a whole as being inclusive and welcoming, and/or taking steps toward becoming more inclusive and welcoming.<sup>15</sup>

While the participants talked more about inclusivity than exclusivity, they were concerned that their peers who were new to philosophy did not feel as welcome as they did (they made 5 comments total about this, and the comments were made independently at various times throughout the focus group). However, they thought the reason for this was more about pre-existing relationships among experienced philosophy students than about sexism or explicit exclusivity. Additionally, students pointed out 3 times that the curriculum of philosophy at Elon is not always inclusive. One student reported that, "On a curricular level, inclusive is not a word I would choose," and another noted that in the many philosophy courses she had taken, aside from her feminist theory course, she had "only learned about male philosophers." The students did report, however, that professors were encouraging to women, citing several times that specific professors encouraged them to pursue the topic further or asked to hear more women in the class speak.

When asked about the department more generally, students spoke of feeling comfortable and welcome. One student says that she "never felt like anyone will judge [her]" and another added that "the professors...are really good at being inclusive." In addition to finding the department inclusive, students found the classes within the department to be egalitarian and democratic, especially appreciating when professors asked for their feedback regarding their class. Another student mentioned that she admired and wanted to be like the students and professors she saw in the philosophy department, which motivated her to take more courses.

While students' perceptions of philosophy and the Elon philosophy department were positive, their perceptions of other philosophy students in their classes were less positive. Students reported feeling frustrated in lower-level philosophy courses, particularly due to the apathy of their peers. There were 4 comments made to this effect, including, "There were lots of ignorant things that were said [in my lower-level class]" and "It's really frustrating when [other students] didn't care." In contrast, they felt comfortable in upper-level courses and expressed dissatisfaction when they had to move from upper-level to lower-level courses.<sup>16</sup> One student, agreeing with another, describes this transition as "the worst situation."

Students mentioned 3 times that gender dynamics were *not* noticeable in the classroom. They reported that the sexism they did experience was exhibited by their peers rather than their professors, with one student saying, in her experience, the sexism is exhibited by "other students

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<sup>15</sup> This FG contained a number of philosophy majors.

<sup>16</sup> Because our department is relatively small, and because most students that take philosophy courses at Elon do not major in philosophy, we do not require prerequisites for our upper-level classes. Indeed, many students' first philosophy class is an upper-level course. This seems to be the case with most of the students of FG1. Yet, once these students decided to major in philosophy (after taking upper-level courses), they had to fulfill the major requirements by later moving 'down' to lower-level courses.

in the class [not the professor]” and that often it is those students’ first experience with philosophy. Another student comments that “men tend to dominate the discussion to a point where it makes it, not purposefully, but [inadvertently] uncomfortable for other people.” Additionally, students wished that gender was a topic of conversation even when the material was not explicitly about women or gender.

Within FG 1, the most common response to analysis question 2 was to talk about inclusion/inclusiveness. Although students worried that newcomers to philosophy would feel intimidated, they generally felt that philosophy, the department, and the classrooms were welcoming to them and to other students. Another theme that emerged within this focus group was their appreciation of being singled out by professors. One student said that “[i]t feels nice” when a professor encourages you to take philosophy. Although students’ perceptions of the philosophic climate were generally positive, they perceived instances of sexism exclusively by male-identified students, particularly those in lower-level courses.

### *Question 2, Focus Group 2*

Perceptions of climate in FG 2 included positive perceptions of their peers and negative perceptions of their professors. There were 9 comments made about pleasant interactions among students in the classroom, connoted by the use of words like “nice” and “respectful.” However, students also report noticing that men dominated the class conversations “expect for a selected couple [of women]” and that there were more men than women in their classes.

Students’ perceptions/experiences of their professors in FG 2 were either neutral or unfavorable.<sup>17</sup> Students reported 7 times that the professor did not allow disagreement, 4 times that professors were vocally opinionated (implying this was an undesirable quality), and 2 times that professors dominated the conversation. One student said that the professor “always said it was student-led” but that the student did not experience it this way. There were also 7 comments made about professors playing favorites. One student reported that she would not have called her professor sexist, but that she did feel that “the girls at the beginning of the semester had to have a little more weight behind what they said.”

When asked about philosophy in general, students had a mix of positive and negative responses. 3 comments were made about philosophy being intellectually stimulating, but 2 comments were made about it being confusing and difficult and 2 comments were made indicating that philosophy was unfamiliar to the students even though they had taken a class. No students expressed a desire to take more philosophy courses and one student even said that she had been planning to minor in philosophy, but that taking one class had dissuaded her from taking more.

### *Question 2, Focus Group 3*

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<sup>17</sup> Although there were two students from the same class, which may have fueled this topic of discussion in ways that caused more codes about professors to emerge.



Overall, participants of FG 3 made fewer comments about their perceptions of philosophy's climate than the previous two FG participants. Students were not familiar with the discipline or the department. Some comments indicated that students would be open to doing philosophy in the future (one student said that you "wouldn't have to work very hard" to persuade her to take a philosophy course), but some students felt that philosophy "wasn't for [them]." When asked about philosophy in general, students offered a range of responses. 3 comments were made about philosophy being intellectually difficult and undesirable because of this difficulty. 2 students talked about philosophy not being welcoming to them (1 said it was because philosophy is intimidating and 1 mentioned that she thought men could relate better to the topic).

Students knew very little about the department itself; 3 mentioned that it was small, but did not know much more about it. Similarly, they did not have particularly strong perceptions about the philosophy majors except to say that they were good at arguing. The knowledge students did have about philosophy courses at Elon came from their friends who had taken philosophy before and had had positive experiences.

#### *Question 2, Cross-Focus Group Analysis*

While common threads emerged throughout each individual FG, a cross-FG comparison did not yield many similar codes/code categories. Inclusivity was the most prevalent code in the first group; positive perceptions of students contrasted with negative perceptions of professors dominated the second; and general unfamiliarity was most often mentioned in the third FG. One connection we found was that in both FGs 2 and 3, students perceived philosophy as difficult and confusing, but not in a way that was intellectually rewarding. Each FG did mention that philosophy is a male-dominated field, though it is worth noting that students were primed to consider gender (see Procedure of Methods section).

#### **Question 3: What are factors (past and present) that influence students' decision to take or not take philosophy?**

##### *Question 3, Focus Group 1*

Considering recent discussion regarding pre-university factors that influence students' decision to take philosophy (Baron, Dougherty, and Miller, 2015), we were interested in what, if any, prior experience women in our focus groups had with philosophy before taking their first course. Women of FG 1 equally report having and not having pre-college experience with philosophy. One woman noted that she was not sure why she wanted to take philosophy, but that she "just felt it." Other participants of FG 1 enrolled in their first course to fulfill requirements: one student enrolled to fulfill a general studies requirement, while another enrolled to fulfill a leadership studies requirement. Once in their first class, these women report being drawn to philosophy -- one student reports being drawn in by the class but the vast majority (six other students) report being drawn in by a particular professor. Interestingly, all six students report the same professor, perhaps indicating that even without a department-wide concentrated effort to

recruit female-identified students, positive advancements can be made towards a more balanced gender distribution in the classroom. This professor encouraged them by saying things like, “you have a knack for this,” or, “keep plugging away.” Nearly a third of our codes for why women were drawn to philosophy from our first focus group refer to the influence of a single professor.

The female-identified majors of our first focus group report coming back for more philosophy because they “love it.” They find philosophy useful for their life goals and find it worth much more than the money they pay for the class or the grade they receive at the end. They report that it encourages their creativity, leaves them with more questions than answers (which they love), and engages them as no other discipline does. Each of these codes came up about about 2-3 times. One student in FG 1 spoke about the community established within the department, saying that “philosophy is kind of like a hidden gem on campus and the people that are in it seem to be so much more like myself than anybody else on campus.”

### *Question 3, Focus Group 2*

Of the codes describing why women of FG 2 took their first philosophy course, 33% related to fulfilling requirements. Alternatively, one student reports enrolling because her friend enrolled while another reports enrolling because she was planning on pursuing a philosophy minor. Two report being randomly placed in philosophy and 1 student comments that “[she] ended up getting it because freshmen don't get good classes.”

In regards to why they did not come back for more philosophy courses, nearly a third of the participants’ responses indicate being deterred from further philosophy by their first professor and/or class. They comment that their professor was “very opinionated and [was not] afraid of showing that” and that “the professor sort of played favorites which was tough.” They further noted that if they had started in a lower-level course, or with a different professor, they may have still pursued their minor or have taken another course. Another third of students’ responses indicated that if philosophy overlapped with their major more, they would take more classes. Lastly, one student comments that “as a communications major, I'm all for thinking differently and things like that but I also like to have more concrete answers.”

### *Question 3, Focus Group 3*

Participants of FG 3 report not having thought about taking philosophy (4/14, or 29% of the codes), saying “I guess I’ve never really thought about it. It’s never been a conscious decision,” and, “I didn’t consciously avoid it but I didn’t consciously seek it out either.” They otherwise note not having time in their schedules for philosophy (6/14, or 43%). Others note that were philosophy to fulfill more requirements or more directly relate to their courses of study, they might enroll in more courses. Lastly, one student notes that she has the perception that philosophy is “not the right thing for [her].”

### *Question 3, Cross-Focus Group Analysis*

There was only one category of codes that came up in all three FGs: philosophy’s relation to Elon’s general studies requirements. A small number of majors report taking their first

philosophy course to fulfill a requirement while some students who had never taken philosophy note that if philosophy fulfilled more requirements, they may take a class.

There were several categories of codes that appeared between 2 of our 3 FGs. The first and second FGs revealed the influence of professors in either recruiting or deterring students. Many of our majors report that the reason they came back was because a professor encouraged them to take more philosophy, while the students who had only taken one class report that their negative experience with their professor deterred them from philosophy. Philosophy majors report liking being left with more questions than answers, while students who took one course report not enjoying the same experience. One woman in our first FG reports just “feeling” philosophy, while another in our last FG reports knowing intuitively that it is not right for her. Many participants of our second and third FGs note that if philosophy related more directly to their major (such that they could receive credit toward their major requirements), they may have taken more philosophy.

#### **IV. Discussion**

In the following discussion, we contextualize our focus groups by positioning what participants said within the literature. We find evidence that one class alone did not cultivate a growth mindset in female-identified students, that professors have the potential to ameliorate (or reinforce) extra-philosophic effects, and that students who have not taken philosophy are likely to see their manner of thinking at odds with that required by philosophy.

*One class alone did not cultivate a growth mindset.*

Recall from the introduction to the results section that we asked about fixed and growth mindset to see if, at our own institution, there was a difference in mindset among students who had taken multiple philosophy courses, students who had taken only one class, and students who had never taken philosophy. Many members of Elon’s philosophy department adopt a growth mindset-oriented approach to doing and teaching philosophy. For example, to cultivate a growth mindset, professors often assign drafts or scaffold paper assignments and several faculty members explicitly describe philosophy as something students can (and likely will) get better at. Thus, it was our expectation (or perhaps our hope) that as students took more philosophy classes and were more exposed to this growth mindset approach to the subject, they would view philosophy as something at which they could get better. We consequently hoped to encounter a few growth mindset responses from FG 3 participants, more growth mindset responses from FG 2 participants, and even more growth mindset responses from FG 1 participants.

Our data, however, showed that this was not the case. Although FG 1 had almost all growth mindset responses, this pattern did not hold for FGs 2 and 3. Participants of FG 3 made 42% growth mindset statements and participants of FG 2 made 40% growth mindset statements. In this case, there was not a significant mindset shift after students take a single philosophy class. In fact, students in FG 2 made slightly fewer growth mindset statements than students in FG 3,

suggesting that mere exposure to our philosophy classes is not enough to remedy a fixed mindset approach to philosophy. Of course, we cannot know what encouraged a growth mindset in the students who continued with philosophy; perhaps those who already had a growth mindset were more likely to continue on, for example. But if there is any truth in our hope that exposure to philosophy encourages students to adopt a growth mindset toward the subject, our focus groups suggest that to see the effects of this shift in mindset, it would take more than one philosophy class.

Another point we wish to make regarding fixed versus growth mindsets concerns the utility of each in encouraging female-identified students to continue pursuing philosophy. Students from FG 1 reported several ways in which they were encouraged by professors to continue taking philosophy classes. One student reported a professor encouraging her with a fixed mindset approach, saying “you have a knack for this.” Another student reported a professor making comments more characteristic of a growth mindset, like “keep plugging away.” We are curious about ways in which faculty members in philosophy departments can deploy fixed or growth mindset frameworks. Perhaps positive fixed mindset statements are the most effective way to encourage female-identified students since they are already more likely to think with a fixed mindset. Or perhaps it is most useful to undermine their fixed mindsets as frequently as possible, consistently framing students’ successes as the result of hard work and careful thinking. All we can offer here is that faculty should be careful and strategic with how they encourage female-identified students to continue on with philosophy.

*Professors have the potential to ameliorate (or reinforce) extra-philosophic effects.*

Data from FG 3 supports the claim that students who have never taken philosophy classes can nevertheless have an idea of what philosophy is. In this case, participants of FG 3 considered philosophy to be uncomfortably difficult, to be male-dominated, and to involve frequent arguing. Indeed, students held these perceptions despite claiming to know very little about the particular department, the philosophy majors, or philosophy as a whole.

Although it is unclear whether these perceptions actually played into students’ decisions to not take philosophy classes, and it is further unclear whether students identify these perceived traits as masculine traits, these perceptions nevertheless affirm Calhoun’s (2009) argument that students enter college with an understanding – that is, a “schema” – of what it means to be a philosopher. To be sure, not all students in FG 3 were first-year students, so we cannot be sure if these student’s perceptions were solely formed before entering university (as “pre-university effects” [Baron, Doherty, and Miller 2015]), or if they developed these perceptions in their non-philosophy courses while in college (in what would be more correctly understood as “extra-philosophic effects,” to the extent that these perceptions are formed within the university, but not

in philosophy classrooms).<sup>18</sup> For this reason, we avoid using the term “pre-university effects” in the remainder of this paper, despite its usefulness as a distinction. Rather, we will employ the term “extra-philosophic effects,” in order to connote that students may continue to develop their schema of the philosopher based on their collegiate experiences and the sorts of philosophy they learn in non-philosophy courses.

Yet, if we bridge our observation about FG 3’s schemas with data from FGs 1 and 2, a more complicated picture emerges. Data from FG 1 and FG 2 suggests that students’ classroom experiences, or “classroom effects” (Baron, Doherty, and Miller 2015) might be a more pronounced factor in students’ overall assessment of philosophy rather than any sort of “extra-philosophic effects.” In particular, the only two “classroom effects” that participants mentioned were 1) their experiences with professors and 2) their experiences with other students in the class. We found that these “classroom effects” can either (further) push students away from the discipline, or ameliorate many negative preconceptions that students might have had. For instance, students from FG 2 report not returning to philosophy almost exclusively because of classroom effects, while students from FG 1 report returning to philosophy almost exclusively due to classroom effects. In fact, a number of participants of FG 1 noted that their experiences in the classroom reoriented their previous attitudes towards philosophy.

In terms of the specific “classroom effects” (i.e. the role of the professor and the role of the other students), the experiences of participants of FG 1 and 2 are somewhat reversed. Whereas FG 1 reported mostly positive interactions with professors, and occasionally negative interactions with other students (especially in introductory classes), FG 2 reported positive interactions with students, and negative interactions with professors. This is worth highlighting because it suggests that participants’ experiences with professors were more impactful than participants’ experiences with students.<sup>19</sup> Thus, if it is true that classroom effects may ameliorate extra-philosophic effects, our data also suggests that professors have a more significant role in determining these classroom effects than some other classroom factors. Overall, this suggests professors have a significant degree of agency in mitigating extra-philosophic effects.<sup>20</sup>

*Female-identified students who have not taken philosophy courses see themselves as intuitive thinkers but view philosophy as a discipline for logical thinkers.*

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<sup>18</sup> Indeed, two students within the focus groups acknowledged having read and discussed texts by philosophers in non-philosophy courses. For instance, one student recalls having learned about Machiavelli in a political science course.

<sup>19</sup> We recognize that these mixed results could be due to the differences between the populations probed by FGs 1 and 2. Further focus groups may further clarify these mixed results.

<sup>20</sup> This finding is corroborated by research done at Hamilton College, another small liberal arts institution, which indicates that one of the most significant factors in an undergraduate’s decision to major in a field is the likeability of their initial professor within that field (Chambliss and Takacs 2014).

As noted above, students in FG 3 maintained a distinction - indeed, a duality - between “logical” and “intuitive” thinking. In at least two codes, students identified philosophy and philosophical thinking with the former, and their own mode of thinking with the latter. For instance, one code reads, “[my suitemate] is very logical, which is why philosophy appealed to her [whereas I am more of an intuitive thinker].” Another code expressed a similar attitude: “I don’t think you’d have to work very hard to do that [persuade me to take philosophy]. I mean, I’m half-convinced to take one at some point, simply because I want to be smart and be able to use logic rather than intuition.”

The importance of this distinction/duality lies in how it might inform Calhoun’s theory of conflicting schemas (2012). That is, it may be that some people – in particular, female-identified people – are more likely to see themselves as “intuitive thinkers,” whereas they see philosophy as a discipline more suited for “logical thinkers.” That these students each made these assumptions about the discipline without having taken a philosophy class indicates that extra-philosophical (and possibly pre-university) effects are at play. These statements also indicate that female-identified students are at least implicitly choosing to not take philosophy classes due to a conflicting schema between the philosopher (including philosophic modes of thinking) and themselves.

## **V. Conclusion**

Overall, our FGs revealed three central insights about female-identified students’ perceptions of philosophy. We found that: (1) One philosophy class alone did not necessarily change students’ mindsets about philosophy, (2) Professors have a large potential to ameliorate or reinforce students’ perceptions of philosophy, and (3) Students who have not taken philosophy are likely to see their manner of thinking as being at odds with the kind of thinking required by philosophy.

These three insights point toward several areas for further investigation. For example, future research might explore the most effective ways to utilize fixed or growth mindset approaches to encourage promising female-identified students to take more philosophy courses. Since professors seemed to be more influential in students’ decisions to persist with philosophy than many other classroom factors, choosing the best way to frame encouragement could be particularly effective at recruiting female-identified students.

Additionally, future research might expand upon the tension we discovered between intuitive and logical thinking: do female-identified students view themselves as intuitive thinkers, and view philosophy as a logical subject that may not be for them? If so, it might be important (particularly for logic-focused departments) to cultivate growth mindsets among their female-identified students, to emphasize that logical thinking is not a gendered ability but rather a skill one can develop, and to articulate that it is not the only method of producing knowledge.

Our focus groups have also illuminated action steps for our particular department. The professors on our research team have redoubled their efforts to frame philosophy as something at which one can improve, so as to challenge fixed mindsets. Additionally, after hearing from FG 3

that students were learning about philosophy from departments across campus, our research team held a workshop with non-philosophy faculty members regarding teaching philosophic works/authors in a more inclusive fashion. It is our hope that opening conversations about female underrepresentation with other faculty teaching philosophers and philosophic ideas can help change how students perceive philosophy, even with they are not in a philosophy class.

While each philosophy department is different and thus will need different strategies for ameliorating the underrepresentation of female-identified students, our research team can make two general recommendations. First, our focus group data indicates that professors should take seriously the impact they can make on students simply by encouraging them to take more philosophy courses. While it is true that the instructor of a course does not have complete control over how a course goes (and perhaps has less control than students often assume), it seems that since students *perceive* such a high amount of power/influence, this influence can actually be used in ways that encourage female-identified students to take more classes.

Second, departments wanting to address gender inequality should consider working with students. This co-investigation allows faculty to gain a more accurate understanding of how students perceive their philosophy courses, instructors, and the department as a whole (Bloch-Schulman et al, in preparation). In fact, the focus groups could not have been conducted without the students on the research team, and conducting them has proven essential for our department as we move forward and think about how to change students' perception of the department as not necessarily sexist, but also not particularly welcoming to female-identified students.

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## Appendix B

### Why So Few Female-Identified Students in Undergraduate Philosophy Courses?: Identifying (and Eliminating) Some Possible Factors

Ann J. Cahill, Nim Batchelor, Stephen Bloch-Schulman, Kimberly Fath, Claire Lockard, Helen Meskhidze, and Sean Wilson

#### Introduction

The Philosophy Department at Elon University has a typical problem in philosophy: we have a gender gap between our introductory classes (where approximately 50% of the students identify as female) and our group of majors (approximately 33% of whom identify as female). This situation means that many of our classes have significantly fewer female-identified students than would come from a random sample of Elon undergraduates, given that the student population as a whole is just under 60% female-identified. Although the disproportionate number of male-identified students in our classes is striking, it is hardly surprising; in fact, the comparative absence of female-identified persons in the field of philosophy in general (as undergraduate majors, graduate students, and PhDs, not to mention tenured and/or full professors) has been well documented (Antony 2012; Calhoun 2009; Paxton, Figdor, and Tiberius 2012). Moreover, there is increasingly widespread concern about the way female-identified persons are treated in philosophy departments, particularly in the United States (Haslanger 2008; Marcous 2014). Thus, it would seem that philosophy has an unfortunately well-earned reputation for being unfriendly or hostile to female-identified students (both graduate and undergraduate) and faculty.<sup>21</sup>

With both our specific situation and the larger disciplinary situation in mind, six members of our department (three faculty and three undergraduate students) developed a two-year research project dedicated to exploring the reasons behind the disproportionately low number of female-identified students in our classes and to developing, potentially, ways to improve those low numbers. We came to see our project as having two goals. First, and most importantly, we sought to identify ways to ensure that the female-identified students who do take our classes are well served and respected; and second, we sought to create the conditions under which the gender split in our classes, our major, and our minor are consistent with the numbers who are undergraduates at Elon, rather than having a gender split that looks like philosophy as a whole. We take this to be not only a practical matter (success on this front would likely increase our enrollment, and perhaps improve the quality of our classes) but also one of justice. We believe that it is essential to identify and address any problems with the environment in our classes and in our department before setting to increase enrollment of female-identified students; we would not want to be encouraging students to enter a discipline and department where they are not treated well.

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<sup>21</sup> See, for example, the “What It’s Like To Be a Woman in Philosophy” blog: <https://beingawomaninphilosophy.wordpress.com/>.

A description of our institutional context is in order. Elon University is a small-to-mid sized Masters level school in the Southeastern part of the United States. The department is small, with seven full-time faculty (four tenured, two other long-term faculty, and a post-doctoral fellow), and has a small cohort of majors (seven graduating seniors this year), not many minors (roughly 30 at a time), and no graduate program. The student body is composed of mostly pre-professional students who have some liberal arts graduation requirements. The students are primarily from families that Jean Anyon would describe as the “professional class”, with some middle class and some in the “executive elite” class (Anyon 1983).

Our process began with a literature review of relevant articles in philosophy, in other disciplines that have addressed similar concerns, and more broadly in the scholarship of teaching and learning and in social sciences. We then developed a mixed-method approach we have not yet seen in the literature, combining extensive analysis of enrollment data for the past six years, surveys of Elon undergraduate students, and focus groups. Crucially, this is a project undertaken collaboratively between faculty members and undergraduates, which offers new possible ways of engaging undergraduates, and undergraduate female-identified students, in particular, in the work of philosophy. This model of co-inquiry (which we consider to be a fourth method in our mixed-method approach) is an example of the ways in which research methodologies can align with feminist commitments.

This article will focus on the results of the second of the four methods listed above. We administered two different surveys to attempt to identify some factors that may explain the disproportionately low numbers of female-identified students in our philosophy courses. The first survey was administered in October 2014 to a random sampling of 1444 undergraduate Elon students; the second was administered at the beginning of the spring 2015 and fall 2015 semesters to students then enrolled in philosophy classes. We applied for and received approval from our university’s Institutional Review Board for the surveys we administered.

### Survey #1

*Methodology.* In October 2014, we launched an on-line survey to attempt to identify some factors that may be explaining the disproportionately high numbers of male-identified students in our philosophy courses. Our survey was emailed to a random sample of 1444 undergraduate Elon students. We received 166 completed surveys; out of that total, 55 respondents had taken a PHL course, and 106 had not taken a PHL course. 115 respondents (69.3%) identified as female, 46 (27.7%) as male, 1 as genderqueer, and 1 respondent preferred not to answer (three respondents did not answer this question at all). These proportions are generally similar to the general makeup of Elon’s student body, although female-identified students are even more highly represented in the respondents than they are in the general population. 31.3% of respondents identified as 1<sup>st</sup> year students; 22.9% as second years; 23.5% as third years; 15.1% as fourth years. While the response rate was fairly low (just under 11.5%), we were assured by our Institutional Research Office that the total number of surveys completed was sufficient to represent the Elon student body fairly well.

We asked the undergraduate students who had taken philosophy classes a series of questions about their experiences in those classes, as well as their general interest in philosophy courses. For those who had not taken philosophy classes, we asked a series of questions that attempted to isolate possible motivations for not choosing philosophy classes. Based on the research we have read (Baron, Dougherty, and Miller 2015; Dougherty, Baron, and Miller 2015; Calhoun 2009), we were particularly interested in finding out whether female-identified students were more likely to view philosophy courses as unrelated to their academic or career goals; whether female-identified students had less interest in philosophical topics; whether female-identified students who had taken philosophy classes were more likely than male-identified students to have had negative experiences in the classroom; whether female-identified students were more likely to approach philosophy with a fixed mindset; and so on. A complete list of the questions we used are provided in Appendix A; note that some of these questions are either identical or very similar to questions used by Baron, Dougherty, and Miller in their research (2015).

*Results.* We received assistance from our university's Institutional Research Office in interpreting the results, and we found that there were only three questions that resulted in data that showed a statistically significant difference between the responses of those who identify as female and those who identify as male. Thus, our most basic finding is that, with regard to the questions we posed to the respondents, there was a consistent lack of statistically significant gender differences among the respondents.

Among respondents who had taken a philosophy class, only one question produced statistically significant difference among their answers. With regard to the statement "I believe I can do well in philosophy," where respondents were asked to indicate their agreement or lack of same on a 5-point Likert scale (where 1=strongly disagree and 5=strongly agree), the average of the responses from female-identified respondents was 3.76, whereas the average of the responses from male-identified respondents was 4.20. Appendix B includes detailed results for this question. Importantly, there was no statistically significant difference between female- and male-identified respondents on questions regarding experiences of feeling respected (by instructors or peers) within philosophy classes.

Among respondents who had not taken a philosophy class, two questions produced statistically significant differences among the responses. With regard to the statement "I didn't know enough about philosophy to know if it would be interesting," on the same 5-point Likert scale, the average of the responses from female-identified respondents was 2.86, whereas the average of the responses from male-identified respondents was 2.35. Finally, when indicating their agreement or lack of same with the statement "I am interested in the topics addressed in philosophy courses," on the same 5-point Likert scale, the average of responses from the female-identified respondents was 3.38, whereas the average of responses from the male-identified respondents was 3.77. Appendix B includes detailed results for these two questions.

For both groups – those who had taken a philosophy class and those who had not – we asked similar questions regarding various factors or motivations. Interestingly, we found no statistically significant results that indicated any gendered differences among either group in the following areas:

- The role of intellectual goals in determining whether to take a philosophy course;
- The role of career goals in determining whether to take a philosophy course;

- An indication of a fixed or growth mindset in relation to philosophy;<sup>22</sup>
- Concerns about the challenge of philosophy courses; and
- Concerns about whether philosophy courses are interesting.

*Discussion of results.* We are, on the whole, reassured that there is no data to suggest that female-identified students find our philosophy classes less friendly, welcoming, or valued than male-identified students do. The gender differences that do exist seem to speak to the effects of pre-existing schema; that is, there seems to be some evidence that female-identified students are less confident in their ability to do well in philosophy, and less confident that the topics discussed in philosophy classes will be of interest to them. Even the gender difference with regard to their pre-existing level of knowledge of philosophy may speak to a cultural association of philosophy with masculinity.

We are particularly interested in the gender difference associated with the statement “I believe I can do well in philosophy” among those respondents who had taken at least one philosophy class. Not only did those respondents who identified as female report receiving higher grades than male-identified respondents on this survey (although not to a statistically significant degree; see Appendix B), but our own research indicates that, on the whole, female-identified students come to philosophy classes with higher GPAs than their male-identified counterparts, and then, on the whole, receive higher grades than their male-identified peers in philosophy classes. Perhaps even more strikingly, they receive grades in our classes that are, on the whole, higher than their GPAs **NEED MORE DETAILED NUMBERS HERE, PERHAPS IN FOOTNOTE**. So, at least on the basis of how the grades of female-identified students compare to the grades those students are accustomed to receiving (based on their GPA), and how they compare to the grades received by their male-identified counterparts, it would seem that the female-identified students’ comparatively low confidence in their ability to do well is not well grounded. Or, alternatively (and possibly simultaneously), the confidence reflected in the responses of the male-identified students isn’t sufficiently well-grounded. It’s also possible, of course, that female-identified and male-identified students have different understandings of what it means to “do well in philosophy,” understandings that are quite separate from grades, a possibility that our survey did not take into account.

In addition to these statistically significant differences among responses to specific statements, we noted another aspect of our results that was particularly compelling, even though the data are not strong enough to make any strong conclusions. As mentioned above, there are statistically significant differences among female-identified and male-identified respondents who have not taken philosophy classes with regard to whether they are interested in the topics addressed in philosophy courses. Yet when students who have taken philosophy classes are asked to indicate their level of agreement with a similar statements (such as “I find philosophy interesting” and “Topics discussed in philosophy are meaningful to me”), we find no statistically significant differences between female-identified and male-

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<sup>22</sup> Carol Dweck’s influential work on mindset (2007) distinguishes between a person’s belief that a specific skill or ability is innate (a “fixed” mindset) and the belief that intellectual ability can be developed with time and practice (a “growth” mindset).

identified students.

This difference between those students who have taken a philosophy class and those who have not leaves open the possibility that the experience of philosophy classes actually ameliorates gender differences produced, perhaps, by cultural schema. However, our survey is not methodologically strong enough to support a causal claim along those lines, especially because there may be other differences between the two groups that could be having an effect on the results. Most obviously, it is possible that the female-identified respondents who have taken a philosophy class were more predisposed to find philosophy interesting than those who have not taken a philosophy class, or that they were predisposed to dislike the other curricular offerings that would have satisfied the same general education requirements as a philosophy class to a greater degree than the female-identified students who did not choose a philosophy class.<sup>23</sup>

Yet thinking through the two different scenarios (i.e., that there is no relevant difference between the two groups, and thus it is the taking of the class that accounts for the difference in the responses; or that there is a relevant difference between the two groups that accounts for that same difference, not the experience of taking the class) can be insightful. It certainly seems safe to assume that if the female-identified students who have not taken a PHL class are not relevantly different from the female-identified students who have taken a class, then the experience of taking the course might well be the explanation for the change. If there's something different about the female-identified students who take a philosophy class – if, perhaps, they are more similar to male-identified students with regard to their perceptions about philosophy than they are to the female-identified students who don't take the class – then the fact that the perceptions of philosophy are not gendered is not surprising.

In either case, however, the classroom experience does not seem to be causing female-identified students to have a more negative impression of philosophy (unless the female-identified students who take the class actually begin with more positive impressions of the field than male-identified students do, which seems unlikely). So, again, we seem to have some evidence that our classes are not having a negative effect on female-identified students' perceptions of philosophy, and may in fact be mitigating the negative effects of pre-existing schema.

On the whole, the results of this survey indicate that, as a department, we need to focus our efforts on counteracting the schema that are resulting in fewer female-identified students taking our introductory courses. In this sense, our results align well with those of Baron, Dougherty, and Miller (2015), despite

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<sup>23</sup> In Elon's Core Curriculum, students must complete eight credit hours in the "Expression" grouping of disciplines, which includes literature, philosophy, and fine arts (art, dance, music, music theatre, and theatre), and at least four of those credit hours must be in literature. Thus, students who do not choose philosophy to fulfill this requirement must choose between the remaining two subcategories.

the significant differences between our institutional context and theirs (their research was conducted at a large, public Australian university), who surveyed students at the beginning and then again at the end of their philosophy class, and found no evidence that it was the experience in the class itself that caused the poor retention of female-identified students. In fact, Baron et al. concluded that pre-existing attitudes were at least partially responsible for the gendered effect of what we're calling "recidivism," that is, the phenomenon of students' choosing to take another philosophy class in a subsequent semester. It's important to note, however, that unlike the work of Baron et al., our research so far has yielded no positive evidence for a specific explanation of gender differences in recidivism rates; our claim is a bit more modest, which is that we have no evidence to support the hypothesis that female-identified students have lower enrollments in class because of their disproportionate dissatisfaction with those classes. Another difference to note between our survey and that of Baron et al is that the latter only surveyed students in their first semester, whereas our survey included students from the first through the fourth years.

This survey led us to conclude that, as a department, we do not need to make significant changes to what is happening within our classes in order to increase the number of female-identified students in those classes. By and large, female-identified and male-identified students report having similar experiences in those classes. However, if we wish to increase the numbers of female-identified students in our classes, we should take steps to counteract the pre-existing schemas that may result in female-identified students believing that philosophy is not of interest to them or that it presents a challenge to their academic success. Those steps should include active recruitment into our classes, even before those undergraduate students come to campus. Such recruitment should be designed to counteract pre-existing attitudes or schemas – although note that what those pre-existing attitudes or schemas are remains a bit murky.

## SURVEY #2

*Methodology.* The second survey that we administered was far shorter, and only administered to students who were, at the time, enrolled in at least one philosophy class. A link to the survey was sent to all philosophy instructors at the very beginning of the semester, encouraging them to share the link with their students. The questions for the second survey are listed in Appendix C. So far, we have administered the survey three times (in the spring 2015 semester, when 136 students completed it; in the fall 2015 semester, when 196 students completed it; and in the spring 2016 semester, when 96 students completed it). While we are not certain how many instructors actually forwarded the link to their students, there were a total of 275 students registered in philosophy classes in the spring 2015 semester, 384 in the fall 2015 semester, and 294 in the spring 2016 semester. Thus, of all the students enrolled in philosophy classes, 49.5% in the spring 2015 semester, 51.0% in the fall 2015 semester, and 32.7% in the spring 2016 semester completed the survey.

The following two tables compare information concerning gender and course taken between the respondents of the survey and the total group of students enrolled in classes in the respective semester. **By and large, these tables indicate that the respondents are fairly representative of the enrolled**



students as a group, with just a few exceptions (Critical Thinking students were overrepresented in the survey in Spring 2015, and How Should We Live students were slightly overrepresented in the survey in Fall 2015):

Semester	Gender percentages (respondents)	Gender percentages (enrolled students)
Spring 2015	Female: 48% Male: 50% Prefer not to answer: 2%	Female: Male:
Fall 2015	Female: 52% Male: 47% Prefer not to answer: 2%	Female: 55% Male: 45%
Spring 2016	Female: 57% Male: 43% Prefer not to answer: 0%	Female: Male:

Semester	Percentages of respondents in each course category <sup>24</sup>	Percentages of enrolled students in each course category <sup>25</sup>
Spring 2015	PHL 110: What Can We Know? 11% PHL 112: How Should We Live? 20% PHL 210: Critical Thinking 34% PHL 212: Ethical Practice 25% PHL 333: Modern Philosophy 8% PHL 338: Nietzsche 2% PHL 339: Buber 2% PHL 350: Spirit of Israel 3% PHL 379: Philosophy of Art 11%	PHL 110: What Can We Know? 11.3% PHL 112: How Should We Live? 18.5% PHL 210: Critical Thinking 16% PHL 212: Ethical Practice 22.2% PHL 333: Modern Philosophy 5.1% PHL 338: Nietzsche 6.2% PHL 339: Buber 7.6% PHL 350: Spirit of Israel 5.1% PHL 379: Philosophy of Art 7.3%
Fall 2015	PHL 110: What Can We Know? 26% PHL 112: How Should We Live? 36% PHL 210: Critical Thinking 14% PHL 212: Ethical Practice 13% PHL 230: Methods of Philosophical Inquiry 9% PHL 331: Ancient Philosophy 5% PHL 362: American Philosophy 2% PHL 461: Integrative Tutorial 4%	PHL 110: What Can We Know? 23.2% PHL 112: How Should We Live? 25% PHL 210: Critical Thinking 12.2% PHL 212: Ethical Practice 15.4% PHL 230: Methods of Philosophical Inquiry 4.2% PHL 331: Ancient Philosophy 2.6% PHL 362: American Philosophy 4.2% PHL 461: Integrative Tutorial 3.4%
Spring 2016	PHL 110: What Can We Know? 28% PHL 112: How Should We Live? 1% PHL 210: Critical Thinking 4% PHL 212: Ethical Practice 35% PHL 333: Modern Philosophy 16%	PHL 110: What Can We Know? 19% PHL 112: How Should We Live? 17% PHL 210: Critical Thinking 9% PHL 212: Ethical Practice 16% PHL 333: Modern Philosophy 7%

<sup>24</sup> Percentages add up to more than 100% because some students were taking more than one course in the semester.

<sup>25</sup> Percentages in these columns add up to just under 100% because extremely small classes (independent studies, for example) were omitted. Also, one class in the fall 2015 semester (PHL 215: Ethics in Decision Making) was inadvertently omitted from the list provided on the survey, and so is not included here.

	PHL 338: Nietzsche 2% PHL 339: Buber 0% PHL 345: Sex, Gender, Power 24% PHL 356: Restorative Justice 4% PHL 378: Roman Philosophies 2%	PHL 338: Nietzsche 9% PHL 339: Buber 7% PHL 345: Sex, Gender, Power 9% PHL 356: Restorative Justice 3% PHL 378: Roman Philosophies 3%
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The primary goal for this survey was to gain insight on the motivations that students had for choosing philosophy courses in general, and certain philosophy courses in particular, and to investigate whether students' motivations were significantly gendered. We were also interested in asking whether there were any distinct differences in motivations between different semesters. For example, at our university, the Academic Advising office plays a significant role in placing first-year students in their fall semester classes: students provide the office with a fairly extensive list of desired courses, which members of the office then use to register them for a full schedule. While students are free to add and drop courses once they're on campus, their initial registration is done on their behalf, which is not true for subsequent semesters.

Also, although we surveyed students from all levels of philosophy courses, we were particularly interested in what motivated students to join our introductory level classes, and thus our analysis of the data focused on those four classes (PHL 110: What Can We Know?; PHL 112: How Should We Live?; PHL 210: Critical Thinking; and PHL 212: Ethical Practice).

*Results.* The fact that students could indicate more than one motivation for joining a class made the statistical analysis of the data more complicated. [HAVE KIM FATH HELP ME OUT HERE.]

In the spring 2015 semester, the overall responses demonstrated no significant differences between female-identified and male-identified respondents:

**3. What motivated you to take the philosophy class(es) you are taking this semester? Please check all that apply.**

#	Answer	Female	Male	Transgender	Genderqueer	I prefer not to answer.
1	Topic	21	20	0	0	0
2	Professor	10	6	0	0	1
3	Fit with schedule	17	16	0	0	0
4	Fulfills COR (formerly GST) requirements	25	27	0	0	0
5	General interest in philosophy	17	23	0	0	1
6	Fulfills major or minor requirements	24	25	0	0	2
7	Other (please fill in box below)	5	2	0	0	0
	Total	119	119	0	0	4

The results from the Fall 2015 semester also revealed little in the way of gender differences, with one striking difference: female-identified respondents indicated more frequently than male-identified respondents that the topic was a motivation for the choice of the course:

**3. What motivated you to take the philosophy class(es) you are taking this semester? Please check all that apply.**

#	Answer	Female	Male	Transgender	Genderqueer	I prefer not to answer.
1	Topic	50	38	0	0	2
2	Professor	11	15	0	0	0
3	Fit with schedule	25	23	0	0	0
4	Fulfills COR (formerly GST) requirements	31	31	0	0	2
5	General interest in philosophy	36	39	0	0	2
6	Fulfills major or minor requirements	16	15	0	0	0
7	Other (please fill in box below)	5	3	0	0	0
	Total	174	164	0	0	6

Results from Spring '16, which also show little evidence of a gendered effect in terms of motivation:

**5. What motivated you to take the philosophy class(es) you are taking this semester? Please check all that apply.**

#	Answer	Female	Male	Transgender	Genderqueer	I prefer not to answer.
1	Topic	20	17	0	0	0
2	Professor	12	8	0	0	0
3	Fit with schedule	10	9	0	0	0
4	Fulfills COR (formerly GST) requirements	17	12	0	0	0
5	General interest in philosophy	15	17	0	0	0
6	Fulfills major or minor requirements	20	15	0	0	0
7	Other (please fill in box below)	3	2	0	0	0
	Total	97	80	0	0	0

*Discussion.* On the whole, the results from these short surveys indicate that there is not a strongly gendered pattern with regard to what motivates students to choose philosophy courses. In many ways, this is a fairly perplexing result: how can we have such a marked disproportionality among the genders in our philosophy classes if differently gendered individuals seem to be motivated, on the whole, in similar ways? We suspect that, as we have discovered in many aspects of our research, the role of pre-existing schemas (gendered associations with philosophy in general, and perhaps certain forms of philosophy in particular) are exerting more influence on students' choices than are any of the particular motivations that we identified in these surveys.

However, it is interesting that (at least in the Fall 2015 semester) where gender did seem to correlate with specific motives for taking a class, it did so in ways that were counter to the gender disproportionality in each class. That is, although male-identified students are less likely to take our ethical courses, when they do take Ethical Practice, they're more likely than the female-identified students in the class to describe the topic as a strong motivator; similarly, female-identified students in Critical Thinking, where they are even more outnumbered by male-identified students than usual, cite the topic as a strong motivator. Perhaps (although this is mere speculation at this point) the topic must be of particularly high interest to the student to justify taking a course that, consciously or not, is perceived as less gender-friendly than other options.

### *Conclusion*

On the whole, these surveys – both the longer one, distributed to 1444 Elon undergraduate students, and the shorter one, distributed in several semesters to all students who were enrolled in philosophy classes – indicated that there are comparatively few experiences of, attitudes toward, or motivations to take philosophy classes that correlate in a significant way with the identified gender of the respondents. In the long survey, the few questions that did produce statistically significant results seem more clearly associated with pre-existing schema than experiences within our classrooms, a result that resonates with the results of Baron, Dougherty, and Miller 2015. These results validated our departmental efforts to increase the proportion of female-identified students in our classes by offering more of the kinds of classes that female-identified students are likely to take. Moreover, we were gratified, and relieved, to discover that female-identified students are not reporting negative experiences within our classes, thus indicating that we do not have a departmental climate that is hostile to female-identified students.

However, these results also spurred us to ask questions – as of yet unanswered – about how (and if) we are able to directly address the pre-existing schemas that may be preventing female-identified students from enrolling in our classes. We are considering a variety of possibilities along these lines, including working more closely with our Academic Advising department to heighten incoming students' awareness of the course offerings in our department. While it may be beyond the ability of our individual department to accomplish, it also seems that introducing students to philosophy at the high school level – especially if care is taken to introduce it in a gender-friendly way – might be an important way to address these pre-existing schema. We are also looking to reach out to faculty in other

departments who include philosophical texts and thinkers in their classes, to develop pedagogical approaches that could serve to undermine the pre-existing schema.

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## APPENDIX A:

### SURVEY QUESTIONS FOR SURVEY #1

Welcome to the Philosophy Department Survey! The survey is designed to gather information regarding student perceptions of philosophy classes and the philosophy department. Your participation in this survey is entirely voluntary, and all data that we collect is confidential. At the conclusion of the survey, you will be given the opportunity to list your email address if you are interested in participating in further conversations regarding philosophy classes and the philosophy department; however, your email address will not be linked to your survey answers. Aside from assisting us in our research, there are no benefits to participating in this survey, and there are no penalties for not participating. We anticipate that completing the survey will take approximately 20 minutes.

Have you completed or are you currently enrolled in a philosophy course at Elon University?

- Yes, I have completed or am currently enrolled in a philosophy course at Elon University
- No, I have never taken a philosophy course at Elon University

**THE FOLLOWING QUESTIONS WERE ANSWERED ONLY BY THOSE WHO HAD TAKEN OR WERE CURRENTLY TAKING A PHILOSOPHY COURSE.** Unless otherwise indicated, the questions used the following scale:

- Strongly Disagree
- Disagree
- Neither Agree nor Disagree
- Agree
- Strongly Agree

My PHL course(s) is/was/were intellectually challenging.

My PHL course(s) has/have/had an open and welcoming intellectual environment.

Doing well in philosophy depends on natural talent more than hard work.

Doing well in philosophy depends on hard work more than natural talent.

I find philosophy interesting.

Topics discussed in philosophy are meaningful to me.

I am satisfied with the grade(s) I have earned in my philosophy course(s).

I feel/felt comfortable participating in course discussions about philosophy.

Philosophy professors treat/treated me fairly and respectfully.

I can imagine myself becoming a philosophy major.

I was satisfied with the quality of instruction in my philosophy class.

My peers in my philosophy class(es) treat/treated me fairly and respectfully.

Studying philosophy is useful for achieving my goals in life.

Studying philosophy is useful for achieving my career goals.

Studying philosophy is useful for achieving my intellectual goals.

I believe I can do well in philosophy.

Do you expect or hope to take another philosophy course before graduating?

- Yes
- No

What philosophy courses do you hope or expect to take before graduating? Check all that apply. (Note; upper-level philosophy courses have no prerequisites, and thus are open to all students.) [only presented if "Do you expect or hope to take another philosophy course before graduating?" was answered "yes."]

- PHL 110: What Can We Know
- PHL 112: How Should We Live
- PHL 210: Critical Thinking
- PHL 212: Ethical Practice
- PHL 215: Ethics and Decision Making
- PHL 230: Methods of Philosophical Inquiry
- PHL 320: Reclaiming Democracy
- PHL 321: Crafting a Meaningful Life
- PHL 330: Economic Justice
- PHL 331: Ancient Philosophy
- PHL 333: Modern Philosophy
- PHL 334: Political Philosophy
- PHL 338: Nietzsche and the Death of God
- PHL 339: Martin Buber and the Eclipse of God
- PHL 341: Philosophy of Law
- PHL 345: Feminist Philosophy (also titled Sex, Gender, Power)



- PHL 346: Philosophy of the Body
- PHL 348: Environmental Ethics
- PHL 350: The Spirit of Israel
- PHL 356: Restorative Justice
- PHL 360: Philosophy of Education
- PHL 361: Contemporary Philosophy
- PHL 362: American Philosophy
- Other upper-level course not listed above
- PHL 461: Integrative Tutorial (senior seminar)
- PHL 499: Independent Research

Are there courses or topics not currently offered by the department or addressed in the offered courses that would interest you? If so, please list them in the box below.

If there are factors other than course offerings that might change your mind about taking another philosophy course, please list them in the box below. [only presented if “Do you expect or hope to take another philosophy course before graduating?” was answered “no”]

Please indicate your level of agreement/disagreement with this statement: The PHL course(s) that I have completed has/have been influential in determining whether I expect or hope to take another philosophy course in the future.

Please indicate to what degree each characteristic of the philosophy course(s) you have completed listed below has been important or not in determining whether you expect or hope to take another PHL course in the future. If you’ve taken more than philosophy course, please answer about the courses collectively.

	Very Important	Somewhat important	Not at all important
The quality of the instruction	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My interest in the general content of philosophy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The degree of difficulty of the course	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The grade I earned in the course	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The applicability of the course material to my intellectual or academic goals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The applicability of the course material to my	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

career goals The applicability of the course material to my general life goals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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What grade did you earn in your first philosophy course? (If you are currently enrolled in your first philosophy course, indicate the grade you expect to earn in it.)

- A or A-
- B+, B, or B-
- C+, C, or C-
- D or F

If there is a characteristic of the course(s) not listed above that has been influential in determining whether you expect or hope to take another PHL course in the future, please describe it in the box below. (Please refrain from making any references to individual philosophy professors by name; we are primarily interested in general perceptions of philosophy courses.)

Which philosophy courses have you completed (or are currently taking)? Please check all that apply

- PHL 110: What Can We Know
- PHL 112: How Should We Live
- PHL 210: Critical Thinking
- PHL 212: Ethical Practice
- PHL 215: Ethics and Decision Making
- PHL 230: Methods of Philosophical Inquiry
- PHL 320: Reclaiming Democracy
- PHL 321: Crafting a Meaningful Life
- PHL 330: Economic Justice
- PHL 331: Ancient Philosophy
- PHL 333: Modern Philosophy
- PHL 334: Political Philosophy
- PHL 338: Nietzsche and the Death of God
- PHL 339: Martin Buber and the Eclipse of God
- PHL 341: Philosophy of Law
- PHL 345: Feminist Philosophy (also titled Sex, Gender, Power)
- PHL 346: Philosophy of the Body
- PHL 348: Environmental Ethics
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- PHL 360: Philosophy of Education

- PHL 361: Contemporary Philosophy
- PHL 362: American Philosophy
- Other upper-level course not listed above
- PHL 461: Integrative Tutorial (senior seminar)
- PHL 499: Independent Research

**THE FOLLOWING QUESTIONS WERE ANSWERED ONLY BY THOSE WHO HAVE NOT TAKEN A PHILOSOPHY COURSE. Unless otherwise indicated, the questions used the following scale:**

- Strongly Disagree
- Disagree
- Neither Agree nor Disagree
- Agree
- Strongly Agree

We are interested in knowing why you have not chosen to take a philosophy class. For the following set of questions, please indicate the degree to which you do or do not agree with the statements provided.

I didn't know enough about philosophy to know whether it would be interesting.

I preferred other courses to fulfill Core/GST requirements.

I didn't find the course offerings in philosophy interesting.

The course offerings in philosophy didn't forward my academic interests.

The course offerings in philosophy didn't forward my career interests.

I expected the workload in a philosophy course to be too great.

I had/have a negative perception of the quality of teaching in the philosophy department.

I had/have no knowledge concerning the quality of teaching in the philosophy department.

The kinds of students who take philosophy courses are not the kinds of students I want to take courses with.

I expected philosophy courses to be too intellectually demanding.

I did not want to have my views challenged.

I didn't think I could get the grade I wanted in a philosophy course.

I don't see myself as the kind of person who takes a philosophy course.

Please rate the following factors in terms of their importance in determining whether you do or do not expect to take a PHL course in the future.

	Very important	Somewhat important	Not at all important
My knowledge of philosophy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How philosophy courses compare with other courses that fulfill Core/GST requirements	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My interest in philosophy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My perception of how philosophy courses forward my academic interests	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My perception of how philosophy courses forward my career interests	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My perception of the quality of instruction in philosophy courses	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My perception of the kinds of students who take philosophy courses	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My perception of the intellectual demands of philosophy courses	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My course schedule	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My perception of the workload in philosophy courses	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My perception that philosophy courses will challenge my views	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My expectations regarding the grade I would likely earn in a philosophy course	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Whether I can imagine myself taking a philosophy course	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If there were other reasons that influenced your decision not to take a philosophy course thus far, please describe them in the box below. (Please refrain from making any references to individual philosophy professors by name; we are primarily interested in general perceptions of philosophy courses.)

If my schedule allows, I will likely take a philosophy course in the future.

Doing well in philosophy depends more on natural talent than hard work.

Studying philosophy would be useful for achieving my career goals.

Studying philosophy would be useful for achieving my personal goals.

I have the ability to do well in philosophy.

I am interested in the topics addressed in philosophy courses.

In an ideal world, I would take a philosophy course.

## **ALL RESPONDENTS RESPONDED TO THESE FINAL QUESTIONS**

In what year do you expect to graduate?

- 2014
- 2015
- 2016
- 2017
- 2018

With what gender do you identify?

- Female
  - Male
  - Transgender
  - Genderqueer
  - I identify with a gender other than those listed (if willing, please identify gender in text box).
- 
- I prefer not to answer.

What is your major?

Is there anything else you would like to tell us about the philosophy department, philosophy courses, or your impressions of either? Please use the box below to do so. (Please refrain from making any references to individual philosophy professors by name; we are primarily interested in general perceptions of philosophy courses.)

If you would like to engage in further conversations about this survey, or student perceptions of philosophy courses and the philosophy department, please provide your email address here.

**APPENDIX B:  
STATISTICALLY SIGNIFICANT DIFFERENCES BETWEEN FEMALE AND MALE  
RESPONDENTS FOR SURVEY #1**

Among those who took a PHL class:

I believe I can do well in philosophy. [ Sig. (2-tailed)=.019]

<b>17. I believe I can do well in philosophy.</b>						
#	Answer	Female	Male	Transgender	Genderqueer	I prefer not to answer.
1	Strongly Disagree	0	0	0	0	0
2	Disagree	1	1	0	0	0
3	Neither Agree nor Disagree	8	0	0	0	0
4	Agree	23	13	0	1	0
5	Strongly Agree	2	6	0	0	0
	Total	34	20	0	1	0

Statistic	Female	Male	Transgender	Genderqueer	I prefer not to answer.
Min Value	2	2	-	4	-
Max Value	5	5	-	4	-
Mean	3.76	4.20	0.00	4.00	0.00
Variance	0.37	0.48	0.00	0.00	0.00
Standard Deviation	0.61	0.70	0.00	0.00	0.00
Total Responses	34	20	0	1	0

Female-identified students are less likely to believe that they can do well in philosophy. (See below for answer to question about grades.)

Among those who have not taken a PHL course:

I didn't know enough about philosophy to know if it would be interesting. [Sig (2-tailed)=0.32]

**2. We are interested in knowing why you have not chosen to take a philosophy class. For the following set of questions, please indicate the degree to which you do or do not agree with the statements provided.**

**I didn't know enough about philosophy to know whether it would be interesting.**

#	Answer	Female	Male	Transgender	Genderqueer	I prefer not to answer.
1	Strongly Disagree	9	7	0	0	0
2	Disagree	21	7	0	0	0
3	Neither Agree nor Disagree	24	8	0	0	1
4	Agree	24	4	0	0	0
5	Strongly Agree	2	0	0	0	0
	Total	80	26	0	0	1

Statistic	Female	Male	Transgender	Genderqueer	I prefer not to answer.
Min Value	1	1	-	-	3
Max Value	5	4	-	-	3
Mean	2.86	2.35	0.00	0.00	3.00
Variance	1.11	1.12	0.00	0.00	0.00
Standard Deviation	1.05	1.06	0.00	0.00	0.00
Total Responses	80	26	0	0	1

Female-identified students are more likely to agree that they didn't know enough about philosophy to know that it would be interesting.

I am interested in the topics addressed in philosophy courses. [Sig (2-tailed)=.032]



**23. I am interested in the topics addressed in philosophy courses.**

#	Answer	Female	Male	Transgender	Genderqueer	I prefer not to answer.
1	Strongly Disagree	2	0	0	0	0
2	Disagree	15	1	0	0	1
3	Neither Agree nor Disagree	20	7	0	0	0
4	Agree	35	15	0	0	0
5	Strongly Agree	7	3	0	0	0
	Total	79	26	0	0	1

Statistic	Female	Male	Transgender	Genderqueer	I prefer not to answer.
Min Value	1	2	-	-	2
Max Value	5	5	-	-	2
Mean	3.38	3.77	0.00	0.00	2.00
Variance	0.96	0.50	0.00	0.00	0.00
Standard Deviation	0.98	0.71	0.00	0.00	0.00
Total Responses	79	26	0	0	1

Female-identified students are less likely to report being interested in the topics addressed in philosophy courses.

Although there wasn't a result of statistical significance for this one, female-identified students on average reported higher grades in PHL class:

**24. What grade did you earn in your first philosophy course? (If you are currently enrolled in your first philosophy course, indicate the grade you expect to earn in it.)**

#	Answer	Female	Male	Transgender	Genderqueer	I prefer not to answer.
1	A or A-	27	13	0	1	0
2	B+, B, or B-	7	4	0	0	0
3	C+, C, or C-	1	3	0	0	0
4	D or F	0	0	0	0	0
	Total	35	20	0	1	0

Statistic	Female	Male	Transgender	Genderqueer	I prefer not to answer.
Min Value	1	1	-	1	-
Max Value	3	3	-	1	-
Mean	1.26	1.50	0.00	1.00	0.00
Variance	0.26	0.58	0.00	0.00	0.00
Standard Deviation	0.51	0.76	0.00	0.00	0.00
Total Responses	35	20	0	1	0

APPENDIX C:  
QUESTIONS ON SURVEY #2

Q1 Which philosophy class(es) are you enrolled in this semester? Please check all that apply.

- PHL 110: What Can We Know? (1)
- PHL 112: How Should We Live? (2)
- PHL 210: Critical Thinking (3)
- PHL 212: Ethical Practice (4)
- PHL 333: Modern Philosophy (5)
- PHL 338: Nietzsche (6)
- PHL 339: Buber (7)
- PHL 350: Spirit of Israel (8)
- PHL 379: Philosophy of Art (9)

Q8 Are you a philosophy major or minor?

- Yes (1)
- No (2)

Q2 What motivated you to take the philosophy class(es) you are taking this semester? Please check all that apply.

- Topic (1)
- Professor (2)
- Fit with schedule (3)
- Fulfills COR (formerly GST) requirements (4)
- General interest in philosophy (5)
- Fulfills major or minor requirements (6)
- Other (please fill in box below) (7) \_\_\_\_\_

Answer Q3 if “Are you a philosophy major or minor?” is answered by “No”

Q3 Do you intend to take one or more philosophy classes in future semesters?

- Definitely will not (1)
- Probably will not (2)
- Don't know (3)
- Probably will (4)
- Definitely will (5)

Answer Q4 if “Are you a philosophy major or minor?” is answered by “No”

Q4 Do you intend to major or minor in philosophy?

- Definitely will not (1)
- Probably will not (2)
- Don't know (3)
- Probably will (4)
- Definitely will (5)

Q7 With what gender do you identify?

- Female (1)
- Male (2)
- Transgender (3)
- Genderqueer (4)
- I identify with a gender other than those listed (if willing, please identify gender in text box).  
(5) \_\_\_\_\_
- I prefer not to answer. (6)

APPENDIX D  
COMPARISON OF MOTIVATION ACROSS COURSES BY GENDER  
FALL 2015 SURVEY

	HSWL	WCWK	CT																																																																																																																																	
Female	<p><b>3. What motivated you to take the philosophy class(es) you are taking this semester? Please check all that apply.</b></p> <table border="1"> <thead> <tr> <th>#</th> <th>Answer</th> <th>Response</th> <th>%</th> </tr> </thead> <tbody> <tr><td>1</td><td>Topic</td><td>20</td><td>59%</td></tr> <tr><td>2</td><td>Professor</td><td>3</td><td>9%</td></tr> <tr><td>3</td><td>Fit with schedule</td><td>11</td><td>32%</td></tr> <tr><td>4</td><td>Fulfills COR (formerly GST) requirements</td><td>11</td><td>32%</td></tr> <tr><td>5</td><td>General interest in philosophy</td><td>12</td><td>35%</td></tr> <tr><td>6</td><td>Fulfills major or minor requirements</td><td>2</td><td>6%</td></tr> <tr><td>7</td><td>Other (please fill in box below)</td><td>1</td><td>3%</td></tr> </tbody> </table>	#	Answer	Response	%	1	Topic	20	59%	2	Professor	3	9%	3	Fit with schedule	11	32%	4	Fulfills COR (formerly GST) requirements	11	32%	5	General interest in philosophy	12	35%	6	Fulfills major or minor requirements	2	6%	7	Other (please fill in box below)	1	3%	<p><b>3. What motivated you to take the philosophy class(es) you are taking this semester? Please check all that apply.</b></p> <table border="1"> <thead> <tr> <th>#</th> <th>Answer</th> <th>Response</th> <th>%</th> </tr> </thead> <tbody> <tr><td>1</td><td>Topic</td><td>13</td><td>48%</td></tr> <tr><td>2</td><td>Professor</td><td>1</td><td>4%</td></tr> <tr><td>3</td><td>Fit with schedule</td><td>7</td><td>26%</td></tr> <tr><td>4</td><td>Fulfills COR (formerly GST) requirements</td><td>12</td><td>44%</td></tr> <tr><td>5</td><td>General interest in philosophy</td><td>10</td><td>37%</td></tr> <tr><td>6</td><td>Fulfills major or minor requirements</td><td>1</td><td>4%</td></tr> <tr><td>7</td><td>Other (please fill in box below)</td><td>1</td><td>4%</td></tr> </tbody> </table>	#	Answer	Response	%	1	Topic	13	48%	2	Professor	1	4%	3	Fit with schedule	7	26%	4	Fulfills COR (formerly GST) requirements	12	44%	5	General interest in philosophy	10	37%	6	Fulfills major or minor requirements	1	4%	7	Other (please fill in box below)	1	4%	<p><b>3. What motivated you to take the philosophy class(es) you are taking this semester? Please check all that apply.</b></p> <table border="1"> <thead> <tr> <th>#</th> <th>Answer</th> <th>Response</th> <th>%</th> </tr> </thead> <tbody> <tr><td>1</td><td>Topic</td><td>6</td><td>75%</td></tr> <tr><td>2</td><td>Professor</td><td>0</td><td>0%</td></tr> <tr><td>3</td><td>Fit with schedule</td><td>1</td><td>13%</td></tr> <tr><td>4</td><td>Fulfills COR (formerly GST) requirements</td><td>5</td><td>63%</td></tr> <tr><td>5</td><td>General interest in philosophy</td><td>3</td><td>38%</td></tr> <tr><td>6</td><td>Fulfills major or minor requirements</td><td>0</td><td>0%</td></tr> <tr><td>7</td><td>Other (please fill in box below)</td><td>2</td><td>25%</td></tr> </tbody> </table>	#	Answer	Response	%	1	Topic	6	75%	2	Professor	0	0%	3	Fit with schedule	1	13%	4	Fulfills COR (formerly GST) requirements	5	63%	5	General interest in philosophy	3	38%	6	Fulfills major or minor requirements	0	0%	7	Other (please fill in box below)	2	25%	<p><b>3. What motivated you to take the philosophy class(es) you are taking this semester? Please check all that apply.</b></p> <table border="1"> <thead> <tr> <th>#</th> <th>Answer</th> <th>Response</th> <th>%</th> </tr> </thead> <tbody> <tr><td>1</td><td>Topic</td><td>8</td><td>44%</td></tr> <tr><td>2</td><td>Professor</td><td>2</td><td>11%</td></tr> <tr><td>3</td><td>Fit with schedule</td><td>3</td><td>17%</td></tr> <tr><td>4</td><td>Fulfills COR (formerly GST) requirements</td><td>8</td><td>44%</td></tr> <tr><td>5</td><td>General interest in philosophy</td><td>8</td><td>44%</td></tr> <tr><td>6</td><td>Fulfills major or minor requirements</td><td>0</td><td>0%</td></tr> <tr><td>7</td><td>Other (please fill in box below)</td><td>0</td><td>0%</td></tr> </tbody> </table>	#	Answer	Response	%	1	Topic	8	44%	2	Professor	2	11%	3	Fit with schedule	3	17%	4	Fulfills COR (formerly GST) requirements	8	44%	5	General interest in philosophy	8	44%	6	Fulfills major or minor requirements	0	0%	7	Other (please fill in box below)	0	0%
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## Appendix C

# An Argument for Radical Collegiality<sup>26</sup> in Addressing the Underrepresentation of Female-Identified Students in Philosophy: The Joint Work of Students and Faculty as Research-Partners for Change

By

### Abstract:

In this paper, we argue for the benefit of undergraduate-student/faculty co-research collegium in studying the underrepresentation of female-identified students in undergraduate philosophy programs. Based on the experience of three faculty and three undergraduates who have co-investigated the problem within their own department, we argue that such a collegial approach both (1) improves the quality of the research being done and (2) is a powerful learning opportunity for the students and for the faculty. After contextualizing our department and its challenges, we highlight how engaging students as co-researchers improves the quality of the research by making certain types of research possible and having student-researchers offer their expertise, as students, to the analysis of the research as a whole. We also highlight how engaging in faculty-student co-researching teams offers a powerful learning opportunity for both the student-researchers, as they come to find their own values and voice beyond the hierarchy of

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<sup>26</sup> This term is from Fielding, who contrasts “collegiality” with “collaboration,” writing of how the terms are often used interchangeably, and arguing for the distinction, which rests on the following: “In my view, despite its collective surface, collaboration remains a form of individualism because it is, or could be, rooted in self-interest: collaboration is, in effect, a plural form of individualism. In contrast, collegiality is both communal in its ontology and other-regarding in its centre of interpersonal attention: collegiality’s conceptual preferences valorize individuality over individualism and community over contract” (Fielding 1999). While these phenomenon are sufficiently different to warrant different terms, and thus, Fielding’s concern about the erasure of the difference is warranted, pace Fielding, at least in their American usage, there is nothing within the terms themselves that suggest which we ought to use to describe each phenomenon.

traditional school settings and for the faculty-researchers as they come to understand how students experience school and their classes. As we will argue, the scholarship of teaching and learning literature on student-faculty partnerships (which go by many names), would give us excellent reason to expect the outcomes we have gotten here. This article, therefore, offers (1) further evidence of the power of student-faculty co-inquiry partnerships, and, more importantly (2) a context specific argument for the use of this method specifically in researching the underrepresentation of female-identified students in philosophy programs, an approach that has not appeared in any of the literature on the underrepresentation of female-identified students in philosophy programs.

Key words:

Female-identified, underrepresentation, philosophy, student-faculty partnerships, co-inquiry

“[T]he radical collegiality of students and teachers is expressed in the vibrancy of joint work, rooted as much in delight in differences as in delight in what is shared” (Fielding 1999, 24)

In this article, we argue for the benefit of working in faculty-student researchship collegia in trying to understand and address the problems with the underrepresentation of women in undergraduate philosophy classes. To do so, we start with an analogy between women being underrepresented within philosophy and students being underrepresented in the scholarship of teaching and learning in philosophy. One justification for inclusion of underrepresented groups within philosophy is to benefit those who have historically been underrepresented. This is similar to ways affirmative action has often been characterized, namely, that because of historic

unfairness to certain groups, current members of those groups should be affirmatively included primarily to benefit the people who will now have been included.<sup>27</sup> This might have additional benefits to others as well in two ways: first, it might benefit the groups that these people belong to; second, one might, though it is rare to, argue that this has a benefit to those in power who are being inclusive, as it alleviates, to some extent, the moral harm they commit by not rectifying the injustices that have benefitted them, even if they have not directly been responsible for those injustices. That is, it might mitigate their use of their unfairly garnered privilege to harm others. The main justification, in this model, however, is that, like affirmative action traditionally conceived, including others is primarily for the benefit of those now included. This is a fairness argument: there is a good that is available to certain people, denied others, for reasons that are extrinsic to the worthiness of the people who are attempting to accrue those benefits, and that good should be made available to those who have been unfairly denied these goods (or are part of groups that have been). And if, indeed, it is true that there are people who have been excluded, and what they have been excluded from is in fact a good, then this is a powerful argument.

There is also the recognition, which Carmen Marcous identifies with the “diversity rationale,” that recognizes that including diverse peoples in conversation is directly epistemologically beneficial to everyone. As she writes, “dynamic classroom discussion... are only possible when a genuinely diverse set of perspectives are brought together to learn from (and share access to) a wide variety of individually lived experiences” (Marcous 2014, 24) and this “genuine diversity” has not been possible because of the historically unjust exclusion of certain groups. That is, this model is not primarily focused on those who belong to the groups

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<sup>27</sup> While we here follow much of Marcous’s work, focusing, for example on affirmative action. But her description of affirmative action and ours differs in the following way, XXXX from Marcous, XXXX.

that have historically been excluded — at least, not any more than it is focused on others — it is, rather, intended for the epistemological benefit of everyone that more diverse voices are included.<sup>28</sup>

Based on the experience of three faculty and three undergraduates who have co-investigated the problem within their own department, we argue that such a collegial approach both (1) improves the quality of the research being done and (2) is a powerful learning opportunity for both the student-researchers and for the faculty-researchers. That is, engaging in this way is both good for the students who might otherwise be excluded (or not invited to participate) from the powerful work of changing their departments to make them more just, and for everyone who is involved (though we discuss them in reverse order). After contextualizing our department and its challenges, we highlight how engaging in faculty-student co-researching teams improves the quality of the research by making certain types of research possible and having student-researchers offer their expertise, as students, to the analysis of the research as a

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<sup>28</sup> A caveat is in order here: while it is often articulated as a benefit to everyone that conversations include diverse peoples from diverse positions, it is not always as beneficial to those who have been excluded (at times, likely not at all, at other times, likely somewhat) to those who are in the underrepresented groups, particularly when viewed in comparison to those in privileged groups. In part, one thing underserved peoples might learn, as Ed Whitfield heartbreakingly illustrates in his “What Should My Eight-Year Old Granddaughter Learn about White People?” is how they are not taken seriously by their more privileged peers (Whitfield 2011; see also Huseman 2015). Additionally, due to their epistemic advantages as being in underprivileged positions, as articulated in standpoint theory, they likely know a lot more about the perspectives of those in privileged positions than vice versa. This is not to say that there are not advantages for underserved people being engaged; there might be advantages in the resources (both during the time and that accrue afterwards, for example, through credentialing). Rather, it is to say that many of the advantages for those who are not privileged might be quite different, and in some cases quite a bit less than, the advantages for privileged people by including more diverse people in conversations. But where it is a benefit to everyone, this gives an additional strong argument for inclusive practices. While there might be contexts in which what is beneficial to the excluded group is harmful to everyone else, or vice versa, there are times when both work together, for a positive-sum advantage to all, as we are making the case here.



whole. We also highlight how engaging as a faculty-student co-researching team offers a powerful learning opportunity for the student-researchers, as they come to find their own values and voice beyond the hierarchy of traditional school settings and for the faculty as they come to understand students' experiences within the classes they teach. As we will argue, the research on student-faculty partnerships (which go by many names), would give us excellent reason to expect the outcomes we have gotten here. This article, therefore, offers (1) further evidence of the power of student-faculty co-inquiry partnerships, and, more importantly (2) a context specific argument for the use of this method in researching the underrepresentation of female-identified students in philosophy programs, an approach that has not appeared in any of the literature on the underrepresentation of female-identified students in philosophy programs.

While there is a growing body of excellent research being published about the causes and proposed solutions to the underrepresentation of women in philosophy (see, e.g., Baron, Dougherty and Miller 2015, Calhoun 2009, Schouten 2015 and Schouten 2016) which include the questions about to whom this work is a benefit (see Marcous 2014), we know of nothing published that explores these issues from student/faculty partnerships. While there are students actively involved on their campuses trying to make changes to the climate and culture on their own campuses (Huh and Bremmer 2014) and at least some students working for faculty (see Hall, Rogers and Scott 2015)<sup>29</sup> and some (or one) doing their own research (Aymelek 2015), we know of no student/faculty teams who conceive of their work as a research collegium, that is, as joint work, sharing both the task-defining and task-executing roles in their research.<sup>30</sup> In this article,

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<sup>29</sup> Our impression of this work was that the faculty member David Hall, Sidney Rogers, and Allyson Scott, Centre College, "Undergraduate Student Perceptions of Philosophy."

<sup>30</sup> From the presentations at the UNC and Diversifying Philosophy conferences, it appeared that the University of Chicago efforts were not research efforts but activist efforts, and the work at Centre College was not really a collaboration, but a project where Prof. Hall did the task-

we will highlight why we have worked as a student/faculty team and argue for the advantages of “radical collegiality,” particularly when it comes to issues of the underrepresentation of women in undergraduate philosophy programs.

### **Context for the Project**

This project was undertaken at XXXX University, a small-to-mid sized Masters level school in the Southeastern part of the United States. The department is small, with 7 full-time faculty (4 tenured, 2 other long-term faculty, and a post-doctoral fellow), and has a small major (7 graduating seniors this year) and not many minors (roughly 30 at a time) and no graduate program. The student body is composed of mostly pre-professional students who have some liberal arts graduation requirements. The students are primarily from families that Jean Anyon would describe as the “professional class”, with some middle class and some in the “executive elite” class (Anyon 1983).

Particular to this project, there are three other important contexts that offer needed background. First, the students engaged with this project are not typical of our department. Until these three students, our department had never had an Honors students who majored in philosophy; all three student-researchers are philosophy majors and Honors students, and thus all of them are writing Honors theses (though one of these is in a different discipline, as the student is a double major). These students have all also presented their own independent research at professional philosophy conferences. Furthermore, while students have very rarely gone to graduate school in philosophy from our department, all three of these students were interested in

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defining and the students did the task-executing work. We have reached out to both teams for clarification, without response. On the categorizing of work into task-defining and task-executing, see Young 1990, 214-225.

graduate school, and all three have since applied and been accepted to graduate programs in philosophy.

While the focus of this paper is on the student/faculty partnership, it is also important to note that it involved three faculty and the faculty interaction was built on pre-existing collegial concerns and joint work about teaching and learning in our department. Though it often takes a more peer-advising nature, where the faculty share, discuss and learn from each other as the faculty design and implement their “own” classes, it has also grounded multiple more collective efforts. For example, it has led to, and been strengthened by, the co-mentoring of student papers during the Senior Seminar, wherein each student has a committee including the instructor of the senior seminar and another member of the department, and the other member of the department offers commentary on the student’s work at the Senior Seminar conference after the student has presented their work. In short, the faculty have for a long time valued and spent time and energy “learn[ing] with and from each other” (Fielding 1999, 21). Thus, the faculty members started with “collective commitment to collectivized purposes,” and have also “draw[n] strength from a growing knowledge base and the virtues of teaching as a public practice” (Fielding 1999, 21; on the importance of teaching as a “community property, see also Shulman 1993). It is important to note, though much more common in philosophy than faculty-student co-research on pedagogical matters, faculty collaboration is itself quite rare in philosophy, in philosophy SoTL and in the literature on underrepresentation of women in philosophy.

Finally, it is important to note that this partnership was made possible by two XXXX grants, each of \$6,500 from the school’s XXXX Center. Each XXXX grant was for one year, and offered each participant \$1000, setting aside another \$500 for general project expenses (e.g., gift cards for focus-group participants). Given the amount of time and energy needed and the

particulars of who was involved, this project required funding; while we could have done it as undergraduate research (on our campus, faculty are financially compensated for undergraduate research, and students receive course credit for it), in this case, with students already doing so much undergraduate research as part of their thesis work, it would have been hard to include any more. Funding thus made it possible for the student-researchers to not have to work extra jobs, and was part of holding us all accountable.

### **How Faculty-Student Partnerships Improve Research into the Causes and Possible Solutions to the Underrepresentation of Female-Identified Students in Undergraduate Philosophy Programs**

In this section, we will argue for the epistemological benefits to faculty-student research teams showing how such work leads to more and better understanding of the problems and possible solutions of the underrepresentation of women in philosophy. We do this in two subsections: first, we argue that there are specific methods that can be used only, or best, by faculty-student teams; we will focus on our team's use of focus groups. Second, we highlight the advantage of having faculty-student research teams for the overarching analysis of the data and for articulating what would be more likely successful in solving the problems. In both cases, we rely on Charles Mills' *Blackness Visible: Essays on Philosophy and Race* as our theoretical lodestar. We start, though, by recognizing the typical model for research on the underrepresentation problem, which is that it is identified by faculty and researched by faculty. Typically, whatever input students have is through filling out short surveys. That is,

“In most cases, faculty frame the questions, students provide answers, and then faculty alone decide whether, and how, to respond to that information. This

process often resembles a customer-service relationship.” (Cook-Sather, Bovill and Felten 2014, ix)

We should also mention here that, though our argument is built on standpoint theory and we will discuss it a bit, our main goal is to apply standpoint theory in this context, and so the argument and explanation of it will be relatively brief. Is it articulated and argued for powerfully elsewhere in more detail and with more care (see, for example, XXXX).

### Students talking to Students: Focus Groups

*Blackness Visible* begins with Mills questioning the reasons that black<sup>31</sup> students are uninterested in studying philosophy, and argues that this is based not based on the color of the skin of those who currently teach philosophy but rather on black students’ feeling of alienation and strangeness, that is, of their “not being entirely at home in [philosophy’s] conceptual world (Mills 1998, 3). For black students, this comes about by traditional philosophy’s lack of engagement in issues of race: unlike for women, who have been discussed within the philosophical cannon and who have been the target of derogatory arguments against them, blacks remained simply invisible within the cannon: a non-presence, excluded without having their existences acknowledged and addressed. Mills asks his reader to imagine two parallel universes, that start from entirely different foundational axioms. One, which would be recognizable to most philosophers and white people, starts from and takes seriously canonical philosophy’s proclamations about liberty and equality. The other would be a world where such proclamations about the equal dignity of all exist alongside the systematic injustices of slavery and racism, where the latter are simply never mentioned as being in tension with the first (Mills 1998, 3).

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<sup>31</sup> Mills is interested not only in African Americans, but in the broader category, and uses the lower case “b”, and we follow his lead here.

This dualism would lead to a situation wherein students of color would live in one world and be asked to pretend they live in another, for fear of upsetting those in power, as Mills writes:

And those who have grown up in such a universe, asked to pretend that they are living in the other, will be cynically knowing, exchanging glances that signify “There the white folks go again.” They know that what is in the books is largely mythical as a *general* statement of principles, that it was never intended to be applicable to them in the first place, but that within the structure of power relations, as part of the routine, one has to pretend that it does. (Mills 1998, 4)

Mills here speaks both about the white theoretical standpoint that much philosophy takes as a given and about the cost of speaking truth to power for students of color. Though it may be changing somewhat, the status of women within the contemporary field of philosophy has played a role similar to that of Blacks within the philosophic cannon in the following sense: there are not often explicit arguments that women ought be excluded from the field or that they cannot do philosophy well; rather, the field is set up to speak to general concerns that are not general at all, and that women are likely silently excluded from the field in that way. Though, of course, female-identified people are not the only feminists and feminists are not the only female-identified people who want to do philosophy, the denial of the central importance of feminism speaks to this loudly.<sup>32</sup>

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<sup>32</sup> On our campus, over the past 4 years, classes at the introductory level average about 50% female-identified students; at the upper level (excluding our feminism classes), that number drops to XXXX; our feminism classes, however, have an average of XXX% female-identified students.

For our argument, this analogy is important if we want to understand why female-identified students are underrepresented in philosophy because it gives us reason to be concerned that they may feel that they are asked to pretend to care about the issues that faculty teach, even if they are not interested (Graff 2002); this may be all the more a problem when it comes to possible problems of sexism within the classroom. If the analogy holds, then having students speaking with other students is plausibly going to lead to less need to pretend and less need to hide problems that might exist within the classroom. We therefore used, and advocate for the use of student-run (rather than faculty or staff run) focus groups or interviews to understand the perspectives of female-identified students within philosophy classes and undergraduate programs. A concrete example might illustrate the point here. At his opening remarks to the conference on the underrepresentation of women in philosophy programs at University of North Carolina, the chair, Mark Lange, told a story of how a very good female-identified student articulated the reason she was not interested in majoring in philosophy; her reason was that, as Lange reported, there were simply too many assholes in philosophy classes. While students might use different language (though they might not), talking about the “asshole factor,” how many there are, what their effect on classroom dynamics are, are issues students are likely to find really important to their experience of being in philosophy classes and are issues that they might legitimately be unwilling or reluctant discussing with “adults” (faculty and staff).

Yet, without an honest assessment of what typical female-identified students experiences are like, we might well be missing important information about what leads female-identified undergraduates toward, or away from, taking philosophy classes. Students, at least at XXXX, feel quite comfortable explaining to faculty that they do not want to major in philosophy because it is insufficiently “useful”; they might be less comfortable admitting that they do not want to

major in philosophy because some of the faculty are sexist or that, as much as they like the faculty members, they cannot stand sitting in a classroom full of assholes anymore.

The reasons for the importance of typical student input, as well as the value of student-co-researchers input into the analysis, is built on standpoint theory. In his articulation and defense of standpoint theories' value for black philosophy, Mills argues that it is based on the view that "the processes of cognizing validated by the dominant perspective are being characterized as somehow inadequate" (Mills 1998, 21). Furthermore, part of the recognition of their inadequacy stems from the view that "epistemology as it has traditionally been defined is a neutral and universalistic theory of cognitive norms and standards" (Mills 1998, 21) which it is, in fact, not. In rejecting these supposedly "neutral and universalistic... norms and standards," these alternative epistemologists have argued not merely that traditional epistemologists are wrong, but that "certain issues have been seen as problems in the first place only because of the privileged universalization of the experience and outlook of a very limited (particularistic) sector of humanity—largely white, male, and propertied" (Mills 1998, 22).

As I (Stephen) outline elsewhere, in the case of issues of teaching and learning, the privileged group are the faculty, in particular, because of their (1) expertise, and (2) role within the institution, faculty are likely to misinterpret or misunderstand student perspectives and experiences (Bloch-Schulman 2016). It is also the case that students often raise different issues and concerns that those that faculty think are important (Manor, et al. 2010, 9). I (Stephen) have consistently found that, in these types of partnerships, which I have been engaged in for more than 10 years, students want to talk about power relations and how power is used and misused in



the classroom, issues almost entirely absent from philosophy pedagogy research.<sup>33</sup> This focus plays out, importantly in how the problem of the underrepresentation of women in philosophy is researched. For example, there relatively a lot of research on the status and treatment of female-identified graduate students and in the profession as a whole (Aymelek 2015). This is particularly pertinent, given the data that suggests that the greatest time for the disengagement of female-identified students is between the introductory level and the major, not from the major to graduate school or from graduate school to the profession (Paxton, Figdor and Tiberius 2012). This also is relevant to the focus on what occurs within the philosophy classroom and on what factor the faculty member plays, with relatively little work being done on what students' perceptions are before they enter a philosophy classroom (for examples of where this does show up, and for the reason to take this line of reasoning seriously, see Baron, Dougherty and Miller 2015 and Calhoun 2009 NOTE: CHECK THE CALHOUN). That is, pre-university (or philosophy class) influences have been understudied, and there is little about the role of peers on student's experiences within philosophy classes.

**Is there a concern that we would be promoting those who are oppressed fighting to end their oppression, and does this lead to burn out? If so...**

**On benefits to students, see Bovill and Bulley, 2011: "Benefits include students discovering 'the depth of faculty commitment to their learning' (McKinney et al. 2010), and enhances knowledge about their discipline and the learning process, with increased confidence to**

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<sup>33</sup> A Philosopher's Index search for articles with the word "power" in *Teaching Philosophy*, the main and most prestigious venue for the publication of philosophy pedagogy research in the United States, pulls up but 12 articles, and only 2 of them have the term "power" in the title. We would suggest that, given the importance power plays to students experiences, if students were more involved with philosophy pedagogy research, power analyses would have a much larger focus of what is published and researched.

**express their views in academic settings (Delpish et al. 2010). Others report group cohesion, collective responsibility, and student performance in assessments, as well as staff reports of transformed teaching practices (Bovill et al. 2011).” (Bovill and Bulley 2011, 3) \*\*\*check page number\***

That is, this project was successful in “radically disrupt[ing] the settled roles and forms of teacher-student interaction” (Fielding 1999, 23). As Sean described it:

Well, I remember when this project was just getting started, I would ask you (since I knew you the best as a professor) whether it would be a good idea for me to contribute this or that idea/comment. I remember that you responded to these questions by telling me that I had to see our group (faculty and students) and [sic] equals -- that the project was *our* project. That was really helpful, and I've really tried to see myself as an equal with the rest of the group. I think that this feeling of equality has been supported by the fact that the students have been assigned tasks that are equal to the faculty. So, we actually feel that we are contributing in a meaningful way.

This “contributing in a meaningful way” points to a critical element of “radical collegiality, as Fielding describes it. He writes that the “kind of practice which nurture the collegiality of student-as-teacher are typically dialogic; practices which require us to be open and attentive to each other and the world; exploratory, unpredictable practices in which students are given real rather than pseudo-responsibility for enquires, often including those that they have suggested and shaped collectively (Fielding 1999, 23-24).

Indeed, I had never consciously thought about the power asymmetry between the professor and the student before this project... Overall, this project helped me acknowledge and try to overcome this asymmetry between professor/student.

Claire had a similar experience, writing that “I now see professors as co-inquirers and not gatekeepers of some inaccessible knowledge or expertise. This empowered me to speak up when I wanted to, rather than assuming the "real experts" would think of everything.”

Interestingly, this view of the student’s self-conception transferred to other settings, changing Sean’s self-described vision of himself and of faculty. So, along with changing perceptions of faculty, students changed their view of themselves, seeing their own views and expertise as valuable and worthy of exploring and of guiding our project:

You might say that I developed a habit of thinking of myself as someone who could have a meaningful impact on our research and learning (as long as I did the same reading as the rest of the group), that carried over into my more "regular" activities as a student. Otherwise stated, this project cultivated a mindset wherein I viewed my professors not as "the unquestionably smartest people in the room," but rather as people who are also always in the process of learning. This mindset also better allowed me to see myself (and other students) not as someone who simply needs to know what the professor knows, but as someone who already has a wealth of experiences and knowledge, and has the capability to add to an academic conversation. (I should note that our readings and experiences with the t.a.ing have also informed this attitude/mindset.)

Claire writes:

Throughout the process, I got better at articulating and asserting my viewpoints and opinions in our DIP meetings. Earlier on, it was easy to sit somewhat quietly and listen to the professors in our research group discuss what we needed to do, what we knew and didn't know about our underrepresentation problem, etc. Now, I (and, I've noticed, the other two students, but I'll only speak for myself) am much more likely to take a very active role in our meetings, grabbing a marker to make a to-do list on the board or interrupting the faculty members if I feel they've gone off-topic in a way I can tell the students don't find helpful. Perhaps another way to put this learning is: I have learned to be confident that my perspective as a student is not only valuable to the team but actually constitutive of the work we can do. And this is not only because I am in the position of "student" but because I am a particular student with a particular kind of expertise and perspective that I can and should bring to the table.

In both Sean and Claire’s writing, we can see that they become cognizant of their own unique perspectives and how they inform the research. As Fielding notes, “the collegiality between students and teachers for which I am arguing includes not only a radical, manifest equality [as came to emerge in the project, as evidenced by both students view of their increased sense of power] in which teachers are also learners and learners are also teachers, but also an equality which embraces difference as an important source of practical energy and intellectual creativity” (Fielding 1999, 24).

Part of the students’ finding their own voices as partners and co-researchers might well stem from the faculty members, the supposed experts, stumbling and bumbling. Because many of the methods we used were new for all of the research team, though some of us have considerable experience writing SoTL (and some do not), we were all well outside our wheelhouse of expertise. This led to considerable confusion on behalf of the whole group. For example, in trying to quantify the differences of different classes for the recruitment of female-identified students and the recidivism rate of those same classes, we consistently stumbled over the possibility of whether a single measure, which we were calling “yield” could be accurately determined and if it measured what we thought it might.<sup>34</sup> After more than a year, we do not have an answer; not surprisingly, we have come to realize our need to work with an outside statistician.<sup>35</sup> This meant that, for the students, it is not merely that the faculty refused to offer or gently withheld all or some of their expertise: rather, in real ways, they did not have any. This fundamentally shifted the focus of the work and the collegial nature of it.

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<sup>34</sup> XXXX.

<sup>35</sup> On why this is not a surprise, see Bloch-Schulman 2016, 3-4.

Claire and Helen also describe how they, even after having taken our department's methods class, "Methods of Philosophical Inquiry," and even after having written numerous philosophy papers, came to see more clearly what philosophical methods are and how they contrast with social scientific methods. Claire writes:

By working on the focus groups and co-writing the focus group paper, I have learned how different philosophic methods are from social science methods! I have learned how to better distinguish a philosophic insight or question from a social science one (and how to deploy the different methods as needed). I tended at first to think of the social science approach as limiting or too empirical to tell us much and even though I sometimes still think that, the philosophic conclusions we have been able to draw from this more sociological method could not have happened without mixing our methods. Also I have had respect for people who transcribe and code data as their main research!

Helen writes:

I've learned about asking philosophical questions while within and relying on the expertise of other disciplines. Very generally, this relates to the worthiness question (of first determining if we're worthy of more female-identified students in our classes) as well as the question of what's at stake. These both ring very philosophical to me, but we find ourselves asking them in the process of what would typically be considered a project of social sciences (surveys, focus groups, etc). And they're not questions removed from our research process, but instead deeply engrained.

A more specific example to our role as students with these questions: We conducted focus groups, transcribed, coded, analyzed, and are now writing about them and their implications. Throughout this process, it's been most interesting for me to consider what we're doing in the context of both its own discipline proper as well as ours. Namely, focus groups are a methodology of social sciences, but we also know that we want to go beyond the (what is often limiting) framework, set-up, and analysis of social sciences. So we've had to reconcile these differences in our approach and the typical approach along the way. Some very specific questions that I've been thinking about include: How many students would we need to recruit for our focus groups to have a significant sample vs. a rich sample? What kinds of analysis

questions can we ask of our data? What kinds of reliability are we attributing to our coding/what counts as consensus between coders? How far can we go in to the speculative realm while addressing our questions from our data? Though I think these kinds of questions often come up in the social sciences, I think our responses are quite different when we approach them from the philosophic perspective.

There was also learning that was particular to the gender-specific task and topic we were exploring. For example, the male student-researcher recognized the ways that working on gender issues at Elon has impacted his view of the classes he is currently in, making him aware of the gender dynamics and politics in his classes, and making him more self-aware about what role he can play to foster gender justice, writing:

One thing that I've 'learned' -- or rather 'picked up' -- as a male-identified student through our research is a heightened awareness of classroom dynamics, especially as they relate to gender. I've noticed that men tend to dominate the classroom discussion, repeat what women say without giving them credit, or simply disregard what women say. I'm also aware that there are likely other factors going on that I cannot see. As such, this research has influenced my own comportment in my classes. In particular, I try to be more attentive of how much I speak and, when I do speak, I do my best to reference and build upon what other people have previously said.

Neither of the female-identified student-researchers spoke about their current classes, but when asked about how participating in this research affected (or did not affect) their decisions to apply to graduate school in philosophy, both wrote that this work did not dissuade them from philosophy graduate school (they both were seriously considering when the project started); instead, the main impact was to help them make better, more informed decisions about what programs to apply to by asking better questions. They both write quite similarly, and I quote Helen here:

“I wouldn’t say our project had too much influence on *if* I’d go graduate school. It more has made me cognizant of some of the issues that I need to be taking into account as I visit the school (i.e. asking female graduate students at the schools I’m touring about their experiences as women in the department).”

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## Appendix D

**Data used:** All students who took their first philosophy course (and that course was one of PHL110, PHL112, PHL113, PHL115) between Fall 2011 and Spring 2014 and received a grade of A through F (i.e. no withdrawn / incomplete / etc.)

# Questions of interest

## 1) Are women outperforming men?

**Short answer:** Yes, especially in PHL112, 113, and 115. However, it appears that this may be because female students who take philosophy courses have a higher overall GPA.

Below is a breakdown of grades in each of the four courses by female and male students.

### **PHL\_110 (% of each gender with a given grade in the course)**

Grade	F	D-	D	D+	C-	C	C+	B-	B	B+	A-	A
F	0.9	0	0.9	0.4	0	0.9	3.1	5.3	14.5	28.6	21.2	24.2
M	2.5	0.7	1.8	1.1	3.3	1.8	6.2	4.7	18.8	23.2	20.3	15.6

### **PHL\_112 (% of each gender with a given grade in the course)**

Grade	F	D-	D	D+	C-	C	C+	B-	B	B+	A-	A
F	0.5	0	0	0	0	0.9	0.9	1.4	6.1	13.2	34.0	42.9
M	0.6	0	0.6	0	0.6	2.4	4.7	7.1	15.9	21.8	20.0	26.5

### **PHL\_113 (% of each gender with a given grade in the course)**

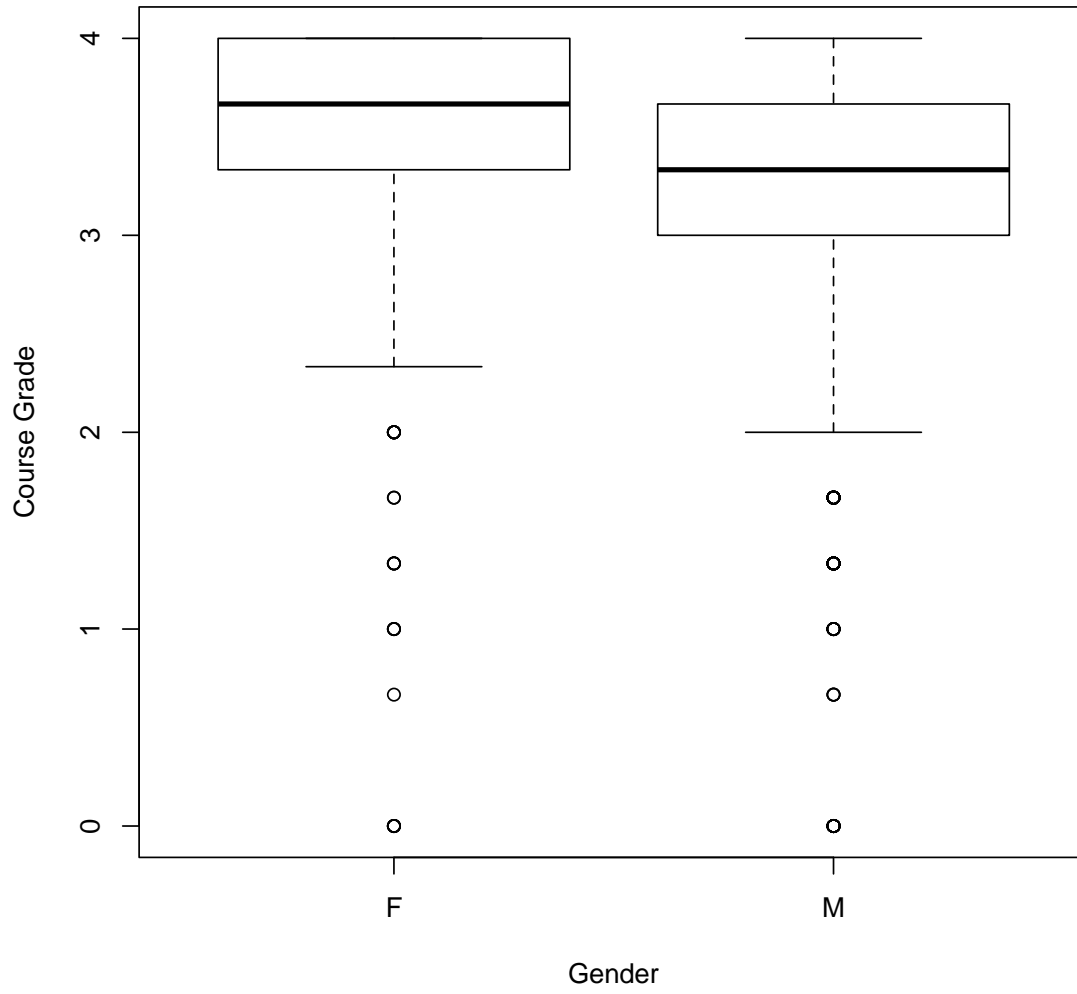
Grade	F	D-	D	D+	C-	C	C+	B-	B	B+	A-	A
F	2.4	0.8	0.8	2.4	1.6	1.6	0.8	5.5	14.2	11.0	27.6	31.5
M	2.2	0.5	0.5	4.9	3.8	4.4	7.1	11.5	16.9	13.1	17.5	17.5

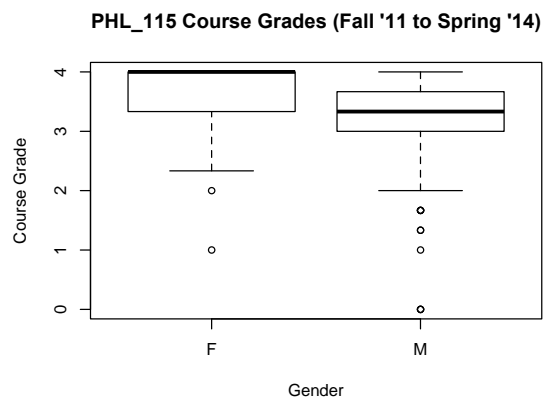
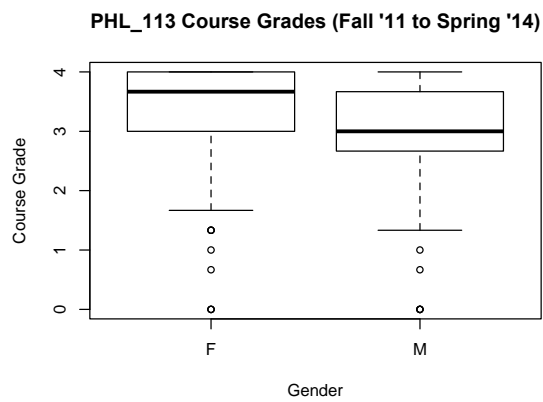
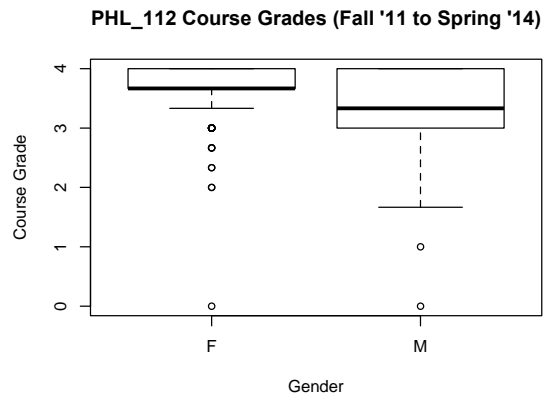
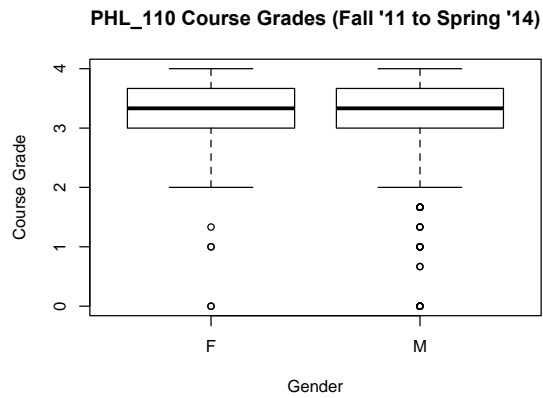
**PHL\_115 (% of each gender with a given grade in the course)**

Grade	F	D-	D	D+	C-	C	C+	B-	B	B+	A-	A
F	0	0	0.7	0	0	0.7	0.7	5.7	7.8	12.1	20.6	51.8
M	2.3	0	0.8	1.5	3.0	1.5	2.3	4.5	14.4	28.0	25.0	16.7

The box plots below illustrate this relationship as well.

### PHL Intro Course Grades (Fall '11 to Spring '14)

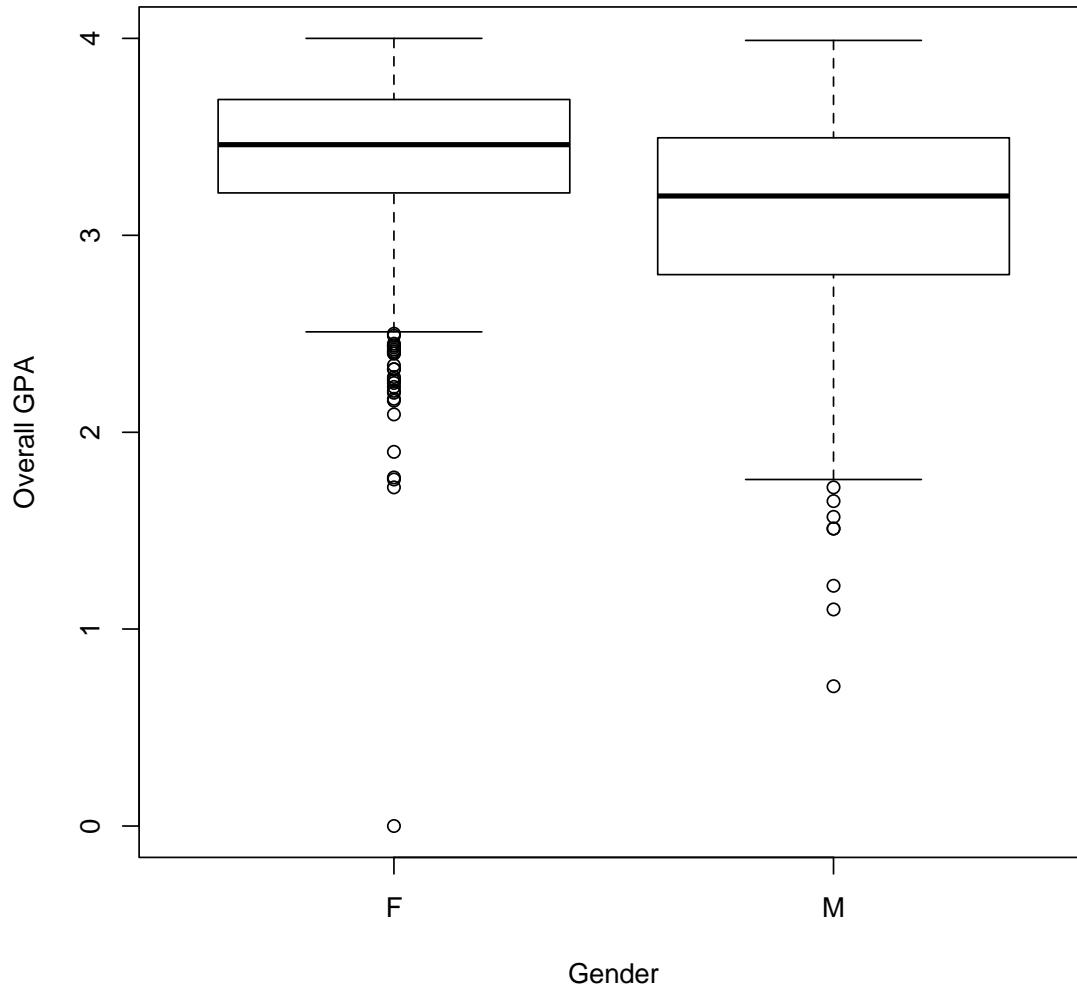




Here is the box plot of student GPA by gender for those students taking their first philosophy class in the designated time frame. Female students seem to generally have higher overall GPAs, which seems to explain why they get higher grades in the philosophy classes.

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## PHL Intro Course Student GPAs (Fall '11 to Spring '14)



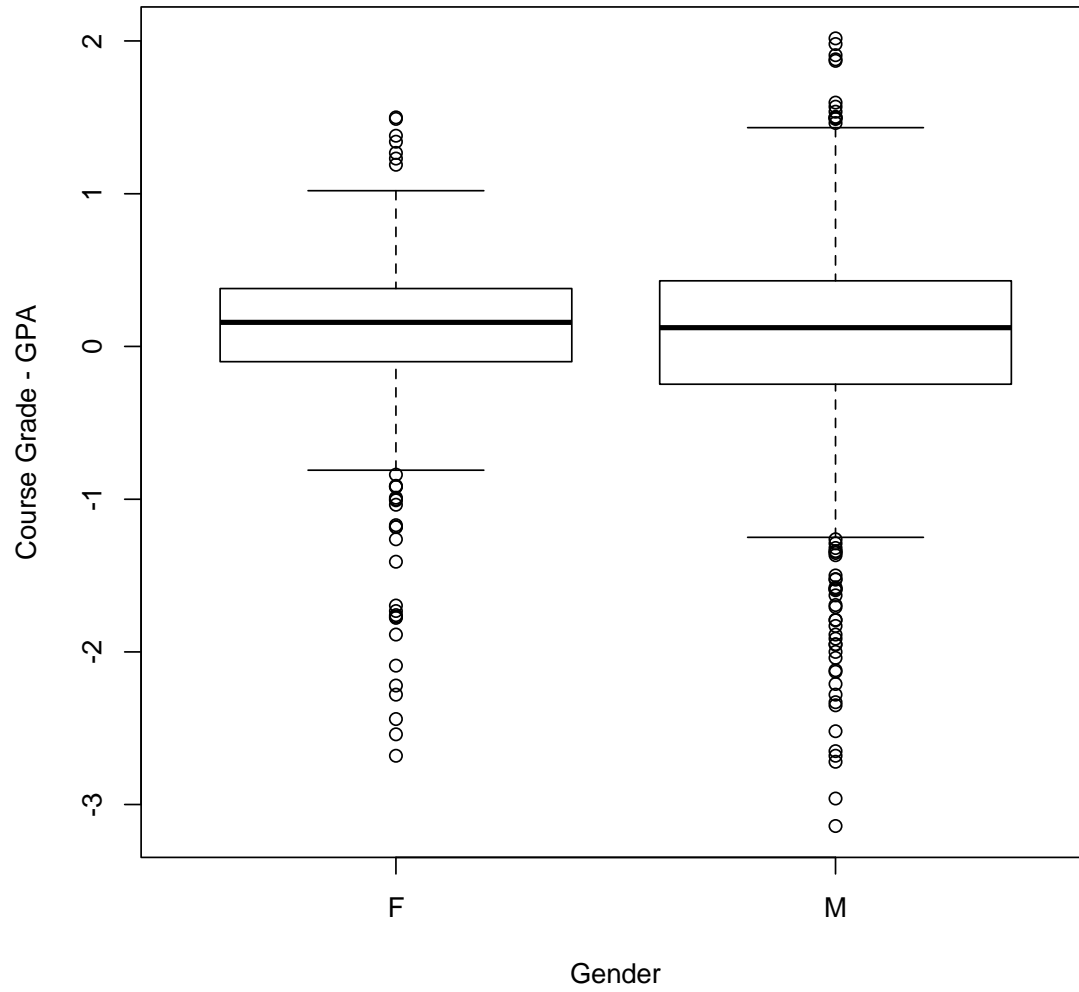
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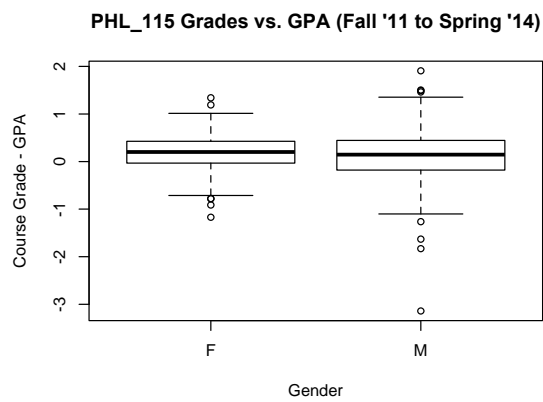
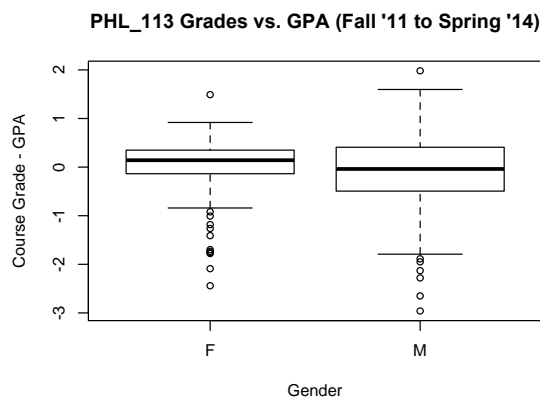
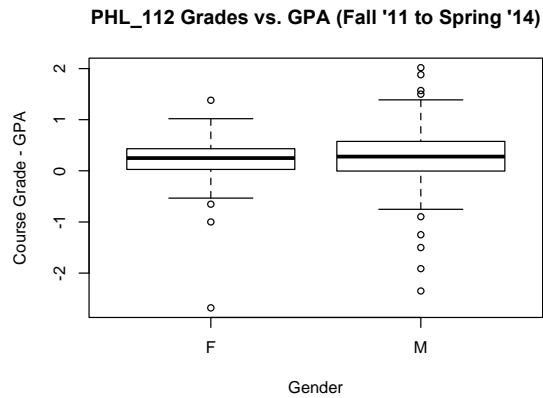
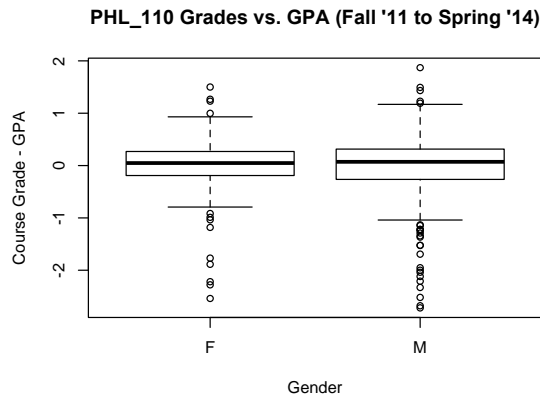
### **2) Is each gender outperforming their own expectations (relative to gpa)?**

**Short answer:** On average, it looks like students are slightly outperforming their own expectations. However, there is a lot of variability. Neither male or female students seem more likely to outperform expectations than the other.

See the boxplots below...

### PHL Intro Course Grades vs. GPA (Fall '11 to Spring '14)





**3) Does “Encouragement” differ between classes? Does it correlate with recidivism? Do M/F respond differently to “encouragement?”**

**Short answer:** There does not appear to be any real relationship between students exceeding expectations and taking a second philosophy class. This holds true for both genders.

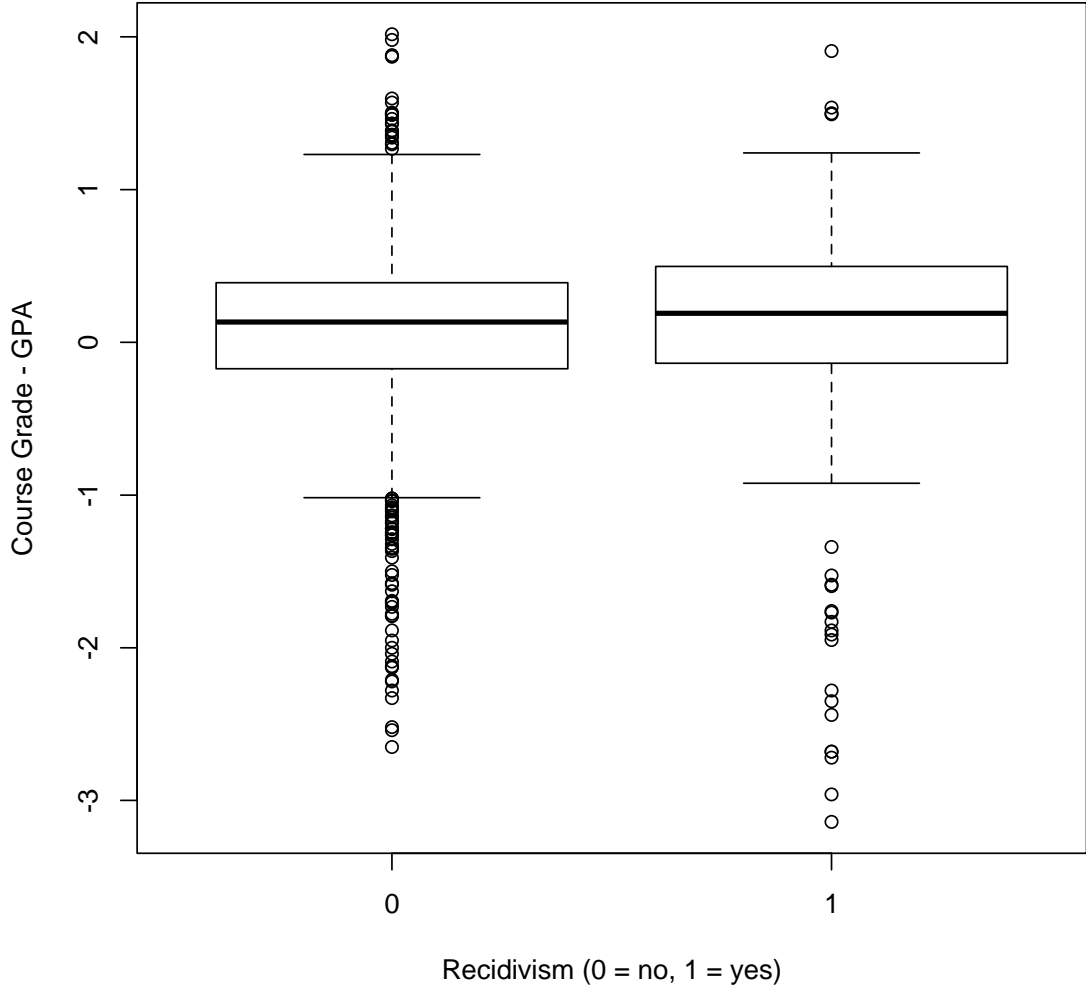
The correlation between recidivism and “Grade – GPA” was -0.018

For female students it was -0.021

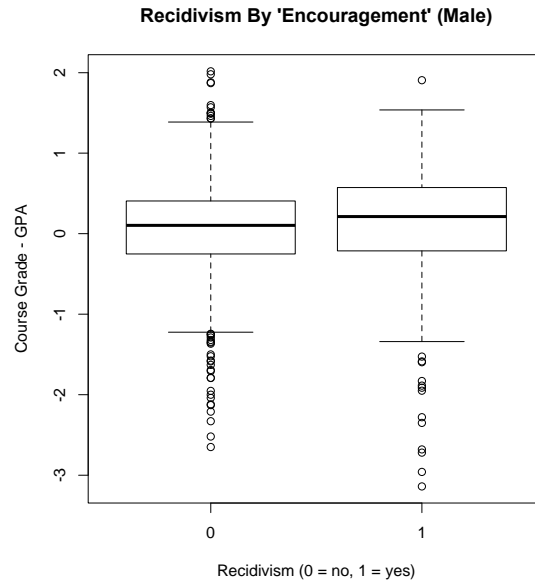
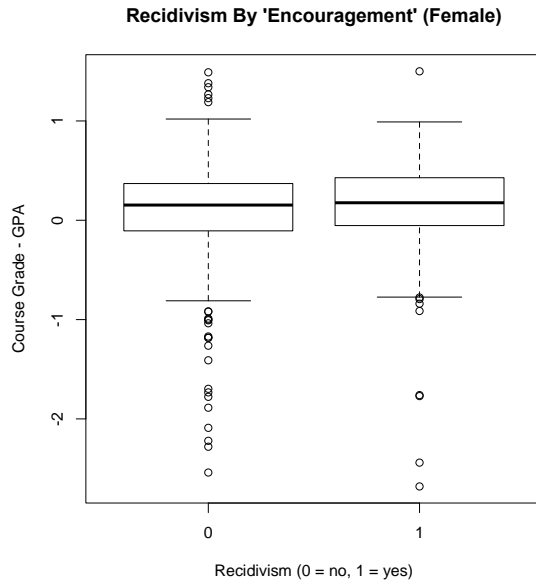
For male students it was -0.012.

All of these are so small that they would be considered essentially 0. This relationship can also be seen in the box plots below.

**Recidivism By 'Encouragement'**







**4) What was the “yield” (broken down by gender) of each course?**

Percent of students that were female / male in each course		
	Female	Male
PHL_110	45.2%	54.8%
PHL_112	55.5%	44.5%
PHL_113	41.2%	58.8%
PHL_115	51.4%	48.6%

Recidivism for each course by gender		
	Female	Male
PHL_110	13.6%	15.6%
PHL_112	15.0%	19.9%
PHL_113	13.3%	15.8%
PHL_115	11.3%	14.2%

The yield was defined according to the following process... Assume 100 students will be taking the course. The yield is the number expected to be female/male + the number of those expected to take a second course. The total yield minus 100 is the overall recidivism percentage for the course.

Yield for each course = Gender% + Gender% \* (Recidivism% / 100)

Yield for each course (broken down by gender)			
	Female Yield	Male Yield	Course Yield
PHL_110	51.3	63.3	114.7
PHL_112	63.8	53.4	117.2
PHL_113	46.7	68.1	114.8
PHL_115	57.2	55.5	112.7