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### High School Preparedness for Higher Education: Gender Differences in First Year Students' Perception of Exam Preparedness

Elizabeth Mahon

Clark University, [lmahon@clarku.edu](mailto:lmahon@clarku.edu)

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# High School Preparedness for College: Gender Differences in Students' Perception of Exam Preparedness

Elizabeth Mahon '23 - Sponsor: Professor Nancy Budwig



## Purpose of This Study:

This study is part of a broader study on the transition to college and exams first year college students' perception of their exam preparedness. This study specifically looked at whether male and female students rate their high school preparation for taking exams in college differently.

## Prior Work On Gender Differences and Exam Preparedness

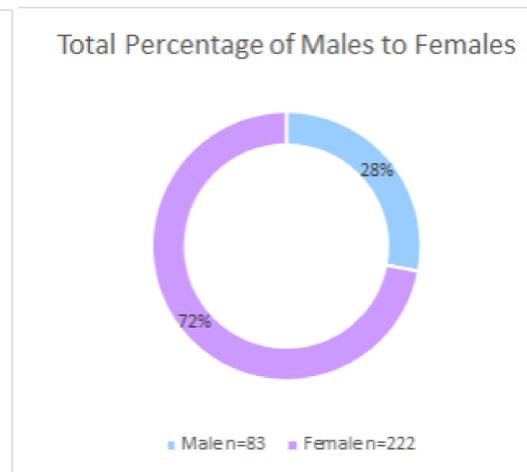
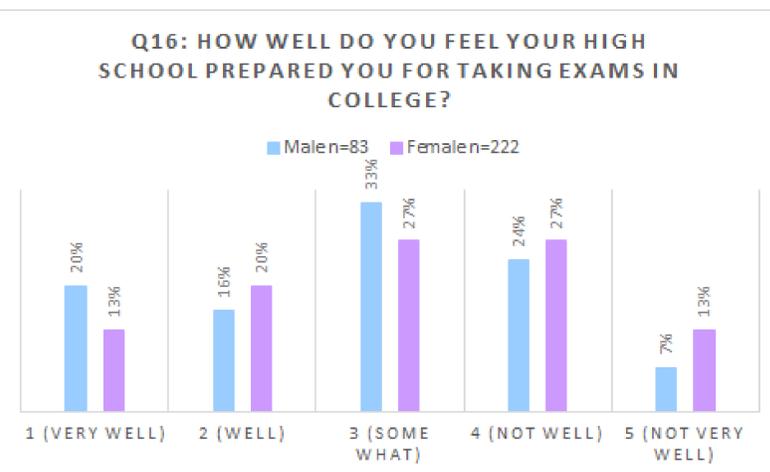
Previous research suggests gender differences in both students' academic success and their perception of their self-assessment in higher education settings. For instance, Appelerouth (2017) found that while females displayed academic success in traditional school environments, they underestimated their abilities in certain academic areas, which in turn affected their career decision making. Further research has suggested that females also underestimate their academic success (Appel, 2011). This can be seen in females attending an engineering college in Spain who were more likely to judge themselves harsher than their male counterparts (Torres-Guijarro, 2017).

## Results:

- A majority of respondents were female with an average ratio of 1:3 males to females in every school.
- A chi-square test of independence showed that there was no significant association between gender and exam preparedness,  $X^2(2, N = 305) = 2.9, p = .57$ .

## Results, Individual Schools:

- At School I nearly half of the males responded with a mid-range preparedness score, females were more evenly distributed (see *fig. 3*)
- Males at School II responded with a 1 at the highest concentration. Females were more likely to respond negatively (47% ranked themselves as a 4 or a 5).
- School III had flipped responses for genders in the categories of 1 and 5 (see *fig. 5*)
- School IV had the smallest response pool and only 3 male participants making comparisons difficult. Yet, almost all males rated themselves a 3, and females were nearly evenly distributed.



Total Schools *figure. 1*

*figure. 2*

## Method:

**Participants:** The study is part of a broader study that surveyed first year students from four colleges working with Association of American Colleges & Universities building curricular pathways for integrative and applied learning. For the purpose of this poster we focus on the 309 students (222 female, 83 male, 1 other gender, 3 others who chose not to answer) who answered both the questions about gender and exam preparedness.

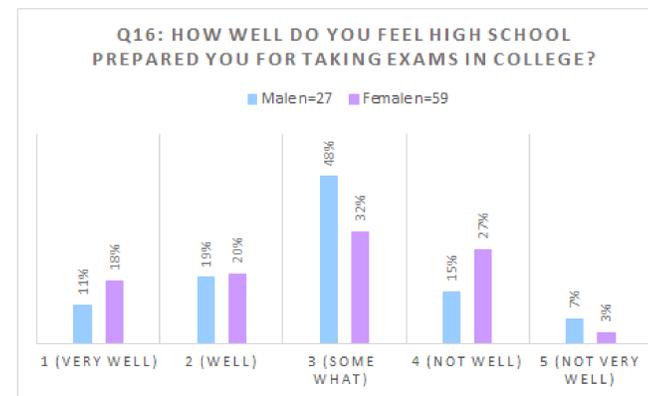
**Survey:** The qualtrics survey consisted of 23 questions about demographics and high school experiences related to higher education preparedness. Questions were both quantitative and qualitative. The questions in focus here asked about student sense of exam preparedness and gender.

**Procedure:** Senior administrators at four participating institutions were asked to send first year undergraduate students a link to the anonymous survey. At the end of the survey students had the option to enter into a raffle for a gift card. The data was taken from a larger study asking participants about their college preparedness, such as applied learning in high school.

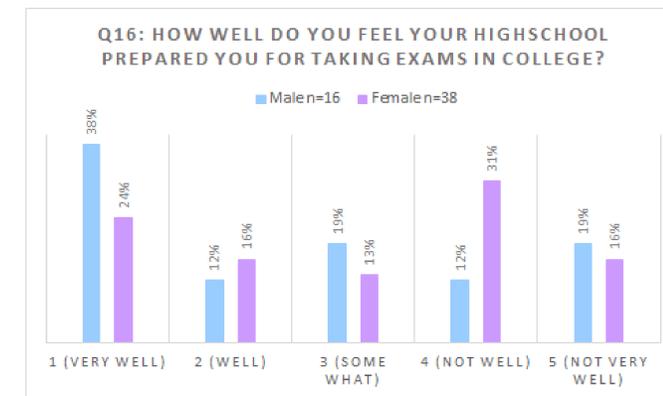
**Analysis:** Responses were tallied based on their rating for the question "How well do you feel your high school prepared you for exams" and instructed to respond between 1 and 5 (1 being very well and 5 being not very well). These respondents were then cross categorized based on the demographic question about gender. Only those indicating either male and female gender were used due to a low number of responses to the other options. A chi-squared test was performed to see if the data was statistically significant. An analysis of individual schools was also performed.

## References

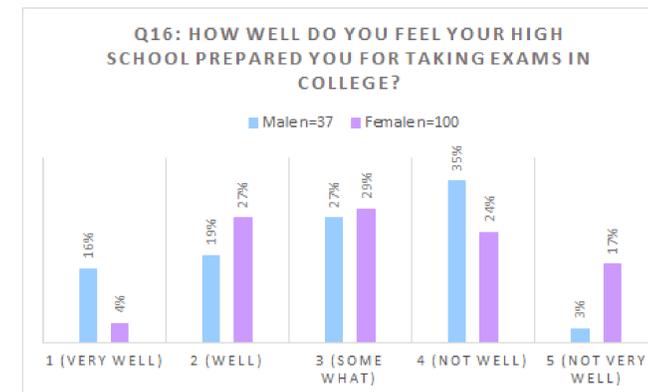
- Appel, M., Kronberger, N., & Aronson, J. (2011). Stereotype threat impairs ability building: Effects on test preparation among women in science and technology. *European Journal of Social Psychology*, 41(7), 904-913. <https://doi.org/10.1002/ejsp.835>
- Applerouth, J. (2017). Troubling gender gaps in education. Retrieved April 15, 2021, from <https://www.applerouth.com/blog/2017/08/15/troubling-gender-gaps-in-education/>
- Soledad Torres-Guijarro & Mercedes Bengoechea (2017) Gender differential in self-assessment: a fact neglected in higher education peer and self-assessment techniques. *Higher Education Research & Development*. 36:5. 1072-1084



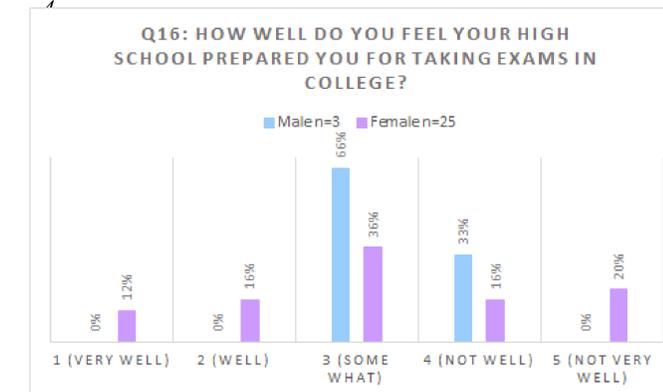
School 1 *figure. 3*



School 2 *figure.*



School 3 *figure. 5*



School 4 *figure. 6*

## Discussion:

- In contrast to prior work we found no differences in gender regard to overall perception, however there were trends at particular schools of interest.
- At individual schools males tended to respond in higher concentrations to one answer when ranking their abilities. Whereas females tended to respond more evenly across answers and this range was usually centralized between a 3 and 5.
- Overall results showed slight differences between genders at individual schools; the variation could be due to females underestimating prediction of their own academic success (Appel, 2011).
- Limitations to this study include small sample sizes and a gender imbalance of the participant pool and the lack of ability to compare self-assessments to actual performance.
- Further research: examining these individuals and comparing the results by examining objective success or specific student perception, such as comparing individual GPA's and their self-ranked perception of that success.