At first glance, how do students view academic instructors?



Ariane Freynet-Gagné, Dr. Danielle Gaucher

BACKGROUND

Gender biases in academia are reflected in student's ratings of their instructors, with males typically receiving better teaching evaluations than their female counterparts (Macnell et al., 2015; Martin, 2015 & Peterson et al., 2019).

Student ratings of professors tend to decline as instructors grow older, although the effect is small (Stonebreaker & Stone, 2015).

The purpose of this research was to further investigate how observable features such as age and gender can affect students' impressions of academic instructors. Specifically, in this study, we investigated whether a gender bias against female instructors existed, and how age affected the expression of this bias (i.e., was there greater bias at younger ages?).

Given the literature on gender stereotypes and age bias in the academy, we hypothesized that male professors may be viewed as more competent and female professors as warmer.

In addition, although participants may be more inclined to learn from an older instructor, we examined whether courses and talks we presented by youthful instructors are perceived as more fun or innovative.

Finally, we examined whether peoples' written interaction with an instructor would differ, depending on the instructor's gender and age. For example, whether people use less formal language when interacting with a younger female instructor than a relatively older male instructor.

METHODOLOGY

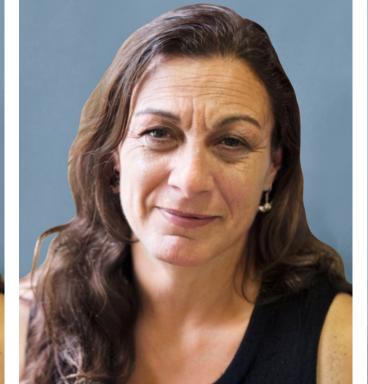
Study Design: This study was a 2 (Gender: Male vs. Female) X 2 (Age: Young vs. Old) factorial design, where all participants were randomly assigned to one of four experimental conditions.

All participants read the same vignette about the instructor (e.g., introducing Dr. McNann, a new instructor specializing Health studies). Only the age and gender of the instructor was systematically varied.

To systematically vary the age and gender of the instructor, publicly available photos were selected from Google images and were equated on the dimensions of attractiveness and ethnicity/race (Figure 1). The age of the photos were systematically varied using the Faceapp (an app that ages faces in a naturalistic way).

Figure 1 Photos of Instructors









After reading the vignette, participants were asked to answer a series of questions assessing their judgements of the instructor. Specifically, we assessed for perceived warmth (Figure 2; 5-point scale where 1 = unlikely to 5 = likely; e.g., not subject to special treatments) and competence (Figure 3; 5-point scale where 1 = unlikely to 5 = likely; e.g., perceived prestige), according to Fiske et al., (2002) Stereotype Content Model, revised by Kervyn et al., (2015).

Moreover, we assessed how participants (despite their personal interests) viewed the possibility of learning from the instructor, and their perception of the instructor's course and talk (Figures 4, 5 and 6; 5point scales where 1 = disagree to 5 = agree; $\alpha = .84$ and .83, respectively; e.g., how interesting, innovative, fun, engaging the course or talk appeared to be).

Participants were also asked to write a short note to the instructor, giving him/her feedback on their proposed course. Formal vs. non-formal language (i.e., making references to Dr. or Professor versus Mrs./Miss./Mr) was analyzed.

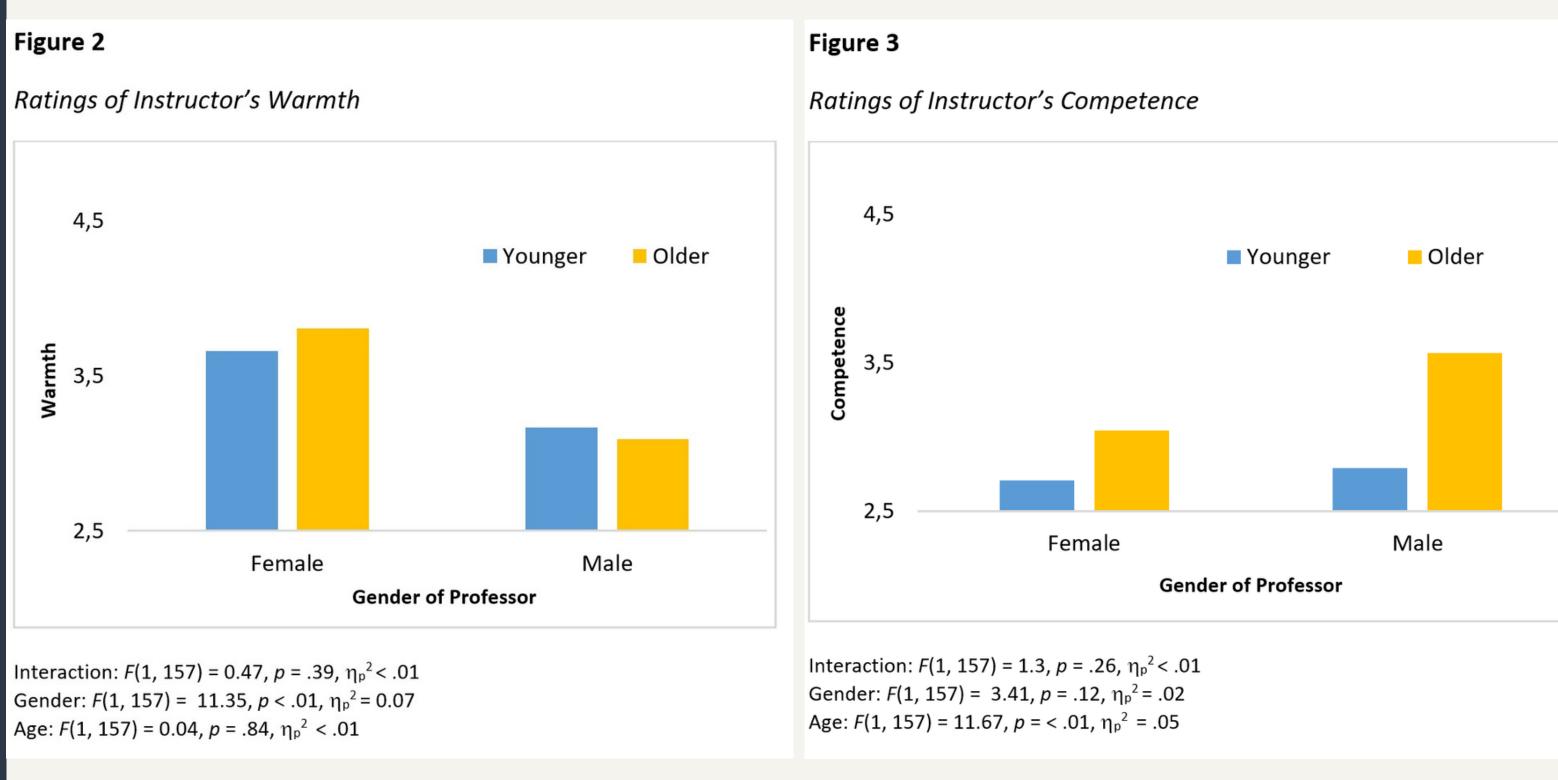
PARTICIPANTS

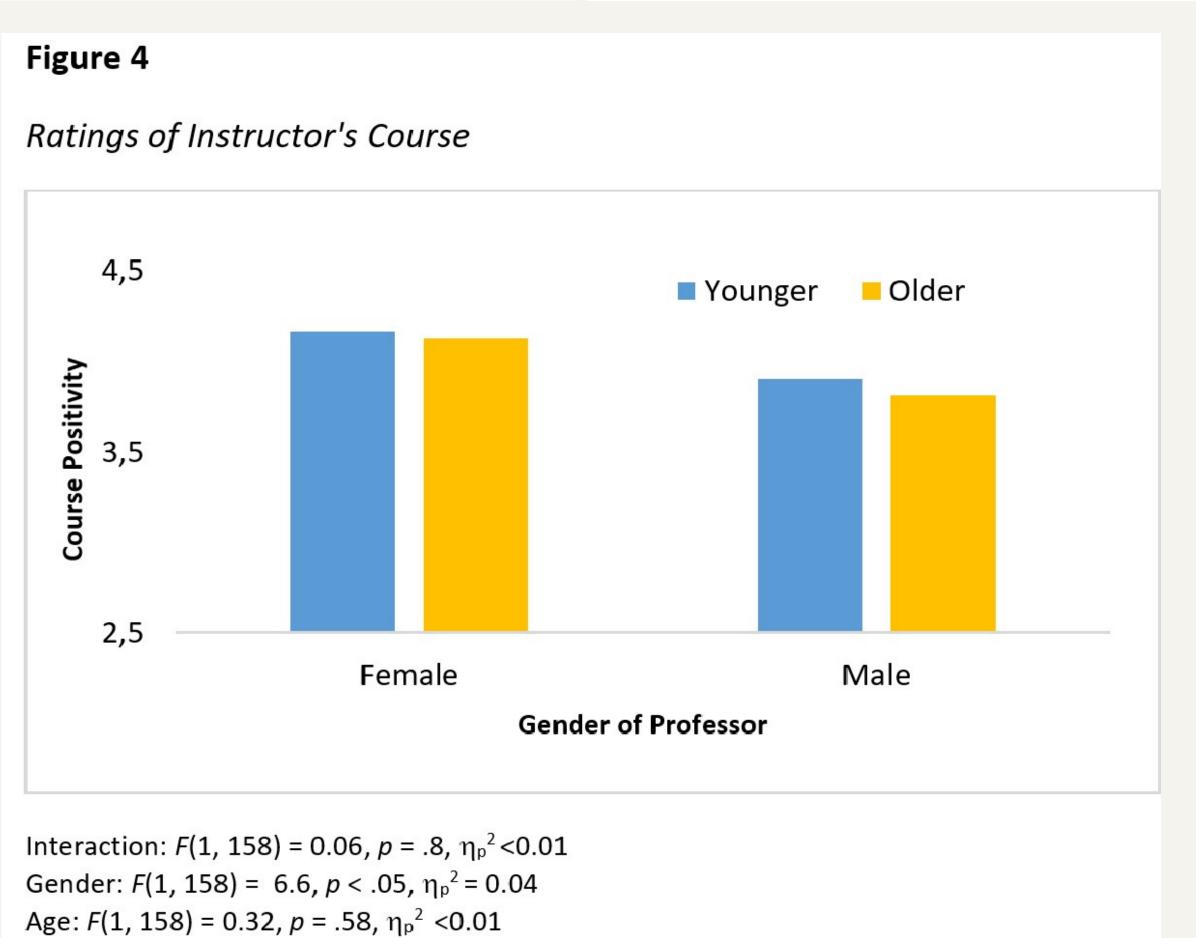
268 participants were recruited for a study on "Students' Impressions of Academic Instructors" via social media.

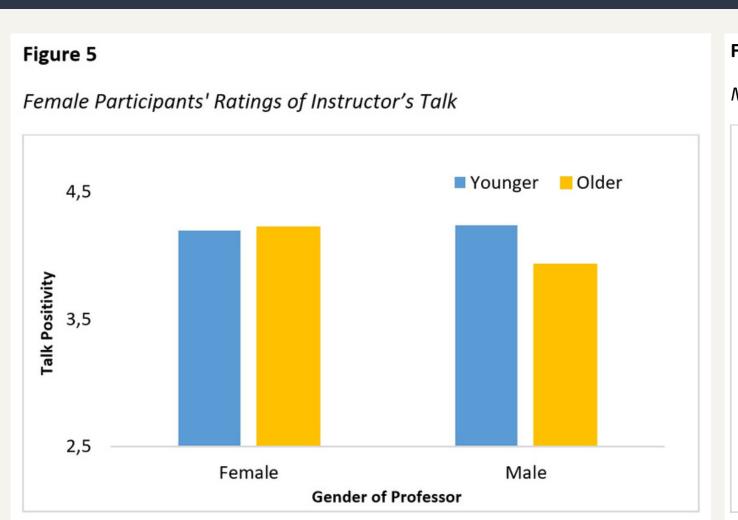
Self-Reported Gender: 75% self-identified as women, 18% as men and 7% as other. Self-Reported Ethnicity: 59% self-identified as White, 10% as Chinese, 8% as South Asian, 7% as Indigenous, 5% as Black, 2% as Filipino, 2% as Arab, 2% as Southeast Asian, 1% as West Asian and 1% as Korean. Age: 73% were between the ages of 18-24 and 13% between the ages of 25-34.

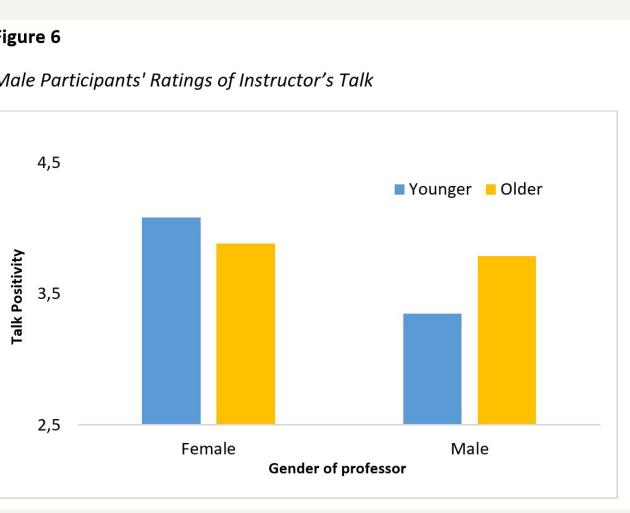
10% reported Health Studies as a main area of study and 84% reported being currently enrolled at a postsecondary institution.

RESULTS









Participant Gender X Gender: F(1, 158) = 0.71, p = 0.49, $\eta_p^2 = 0.01$ Participant Gender X Age: F(1, 158) = 3.3, p < .05, $\eta_p^2 = 0.04$ Participant Gender X Gender X Age: F(1, 158) = 2.45, p = 0.09, $\eta_p^2 = 0.03$

DISCUSSION

Consistent results: Our findings are consistent with Fiske et al., (2002) Stereotype Content Model which suggests that women are generally perceived as warmer than men. While professionals are generally perceived as highly competent according to the Model, our results suggest that perceived competency might interact with age, such that there was a non-significant trend for older male instructors to be rated highest in perceived competency.

Decision makers may like to know that female participants tended to view the possibility of learning from older male instructors, less positively, whereas male participants showed the greatest interest in younger female instructors and the least interest in younger male instructors.

LIMITATIONS

This initial study takes into account age and gender; however it does not take into account other possible moderating factors such as ethnicity.

FUTURE DIRECTIONS

Investigating other observable features that may lead to bias, such as ethnicity.

Perfecting the methodology and investigating if and how the effects of observable features manifest themselves in student to instructor interactions.

CONTACT

For questions and comments about this study, please contact Ariane Freynet-Gagné at gagnea36@myumanitoba.ca

PI would like to thank the Department of Psychology and Dr. Gaucher for funding this research project, with the Psychology Undergraduate Research Award (P.U.R.E Award).

REFERENCES

Kervyn, N., Fiske, S., & Yzerbyt, V. (2015). Forecasting the Primary Dimension of Social Perception: Symbolic and Realistic Threats Together Predict Warmth in the Stereotype Content Model. *Social psychology*, 46(1), 36–45.

Macnell, L. Driscoll, A. Hunt, A. (2015). What's in a Name: Exposing Gender Bias in Student Ratings of Teaching. Innovative Higher Education, 40(4), 291–303.

Martin, L. (2016). Gender, Teaching Evaluations, and Professional Success in Political Science. *Political Science & Politics*, 49(2), 313–319.

Peterson, D. Biederman, L. Andersen, D. Ditonto, T. Roe, K. (2019). Mitigating Gender Bias in Student Evaluations of Teaching. PLoS ONE, 14(5).

Stonebraker, R. Stone, G. (2015). Too Old to Teach? The Effect of Age on College and University Professors. Research in Higher Education, 56(8), 793-812.