2013

Student perception of their instructors do college students rate female professors more harshly?

Courtney Christovich
University of Central Florida

Part of the Psychology Commons
Find similar works at: https://stars.library.ucf.edu/honortheses1990-2015
University of Central Florida Libraries http://library.ucf.edu

Recommended Citation
https://stars.library.ucf.edu/honortheses1990-2015/1812
STUDENT PERCEPTIONS OF THEIR INSTRUCTORS: DO COLLEGE STUDENTS RATE FEMALE PROFESSORS MORE HARSHLY?

By

Courtney Christovich

A thesis submitted in partial fulfillment of the requirements for the Honors in the Major Program in Psychology in the College of Science and in the Burnett Honors College at the University of Central Florida Orlando, FL

Spring Term 2013

Thesis Chair: Dr. Shannon Whitten
Abstract

Student evaluations are often used by administrators to make important career decisions for professors such as offers of tenure, increase in salary or other monetary reward (see Frick, Chadha, Watson, & Zlatkovska, 2009). Research has consistently shown that helpfulness in its various operational definitions is one of the most important traits to students when evaluating a professor (For example Silva et al., 2008). Previous findings have demonstrated that inequalities exist among subjective student evaluation ratings of men and women, (see Bennet, 1982). The present study extended this research by manipulating the instruction styles (strict vs. permissive), as well as the gender of the instructor, in a hypothetical syllabus. Participants were randomly assigned to read 1 of 4 syllabi which varied only by instruction style and gender of the instructor. Subsequently, participants answered follow up questions on the content of the syllabus which emphasized the gender of the instructor. Evaluations were collected in the form of both Likert scale ratings and responses to open ended questions. The written evaluations were analyzed for emotional content using the Linguistic Inquiry and Word Count Software (LIWC, Pennebaker, Francis, & Booth, 2007). A 2 (male vs. female) X 2 (strict vs. permissive) between subjects ANOVA was applied to the data collected. The results support the hypothesis that gender inequalities do exist, particularly when the professor was established as having a strict style of student interaction.
# Table of Contents

Introduction ..................................................................................................................................... 2  
Methods ........................................................................................................................................... 9  
Participants .................................................................................................................................. 9  
Materials ...................................................................................................................................... 9  
Demographics .......................................................................................................................... 9  
Syllabi ...................................................................................................................................... 9  
Professor Evaluations ............................................................................................................ 10  
Procedure ................................................................................................................................... 11  
Results ........................................................................................................................................... 13  
Hypothesis 1: Helpfulness ......................................................................................................... 13  
Hypothesis 2: Availability ......................................................................................................... 16  
Hypothesis 3: Emotion Word Usage ......................................................................................... 18  
Hypothesis 4: Professionalism .................................................................................................. 21  
Discussion ..................................................................................................................................... 22  
APPENDIX A: IRB APPROVAL LETTER ................................................................................ 26  
APPENDIX B: EXPLANATION OF RESEARCH ...................................................................... 28  
APPENDIX C: DEMOGRAPHIC SURVEY ............................................................................... 31  
APPENDIX D: STRICT CONDITION SYLLABUS .................................................................. 33  
APPENDIX E: STRICT CONDITION FOLLOW UP QUESTIONS ......................................... 35  
APPENDIX F: PERMISSIVE CONDITION SYLLABUS ......................................................... 37  
APPENDIX G: PERMISSIVE CONDITION FOLLOW UP QUESTIONS ............................... 39  
APPENDIX I: DEBRIEFING STATEMENT .............................................................................. 41  
References ..................................................................................................................................... 43
List of Figures

Figure 1. ........................................................................................................................................ 15

Figure 2. Availability rating as a function of gender and instruction style ................................. 17

Figure 3. Mean percentages of negative emotion words used and a function of gender and type of instruction. ........................................................................................................ 20
List of Tables

Table 1 Mean scores of helpfulness as a function of gender and instruction type. ....................... 13
Table 2 Mean scores of availability as a function of gender and instruction type. ....................... 16
Table 3 Mean percentage of negative emotion words used as a function of gender and instruction style. ........................................................................................................................................ 19
Introduction

Understanding what constitutes an effective college professor has been a goal of research for the past four decades. Though many common characteristics have been identified among positive evaluations, it seems that some of the most important characteristics are rated more harshly for female professors than their male counterparts (Bennet, 1982). This begs the question, do students require more from a female professor in order to rate her as effective?

Student evaluations of professors were first introduced into higher education in the early 1900’s, but the rise in their status and importance occurred later, in the 1970s (Hativa, 2008). Colleges and universities today rely heavily on the data provided by student evaluations as a means to give administrators empirical feedback on overall teaching quality and individual faculty performance (Driscoll & Cadden, 2010). Teaching evaluations are often used to make important career decisions such as offers of tenure and promotion, and to determine salary increases and other monetary rewards for professors (Frick, Chadha, Watson, & Zlatkovska, 2009). Many of the evaluation forms used for professors are standardized, and therefore give little individualized and practical input to professors. Professors receive little indication as to why they are rated positively or negatively or what they can do to improve their ratings (Frick et al., 2009). Also, despite responses being standardized, students themselves may have extremely subjective, diverse or even biased reasoning for rating professors positively or negatively (Davidovitch & Soen, 2011). As such, this research aims to explore the qualities students consistently rate as important to positive evaluations.
Measures of professor efficacy have varied dramatically, and several common themes recurred. Research has consistently shown that a professor’s helpfulness, in its various operational definitions, is highly important to students when evaluating a professor (Silva et al., 2008; Slate, LePrairie, Shulte & Onwuegbuzie, 2009; Layne, 2012). Through 40 years of research, a common thread has emerged: students want a professor who is willing to help them, both in and out of the classroom. Bennet (1982) surveyed 253 undergraduate students and found that students feel that access to a professor and their ability to approach that professor to be an important factor in how well a professor is rated. In a later study of evaluations given on ratemyprofessor.com, Silva et al. (2008) concluded that professors should increase their willingness to help in order to raise their overall evaluation scores. A study of 171 undergraduate students’ written evaluations of their best and worst college professors found helpfulness and the opportunity to forge relationships with their professors among the most common positive themes (Slate et al., 2009). Students also rated accessibility to their professor and the professor’s willingness to help as highly important characteristics of an effective professor (Layne, 2012). The last major component in positive evaluations is professionalism. Students were more likely to rate a professor as effective if they felt that they are professional (Silva et al., 2008; Slate, LePrairie, Shulte & Onwuegbuzie, 2009; Layne, 2012).

The opposite has also been found to be true. Students tend to rate professors that they feel are unhelpful, unavailable, or unprofessional as ineffective. These students cite a lack of interaction between themselves and the professor as the main cause for poor evaluations (Aulls, 2004).
While the qualities of both helpfulness and availability are consistently rated important to the overall evaluation of a professor’s effectiveness; prior research has found that these may not be evaluated equally between male and female professors. Bennet (1982) conducted a pioneering study concerning the impact of instructor gender on students’ evaluation of their professors. In addition to administering traditional professor evaluations, Bennet gave 253 undergraduate students perceptual orientation scales and inquired as to the context and degree that they interacted with their professors. Despite often having more direct contact outside of class and spending more time face to face with female professors, students rated female instructors as less available than their male counterparts. The perception of a male professor being available and helpful did not affect teaching evaluations as significantly as it did for females, nor did it affect the perception of the male professor’s personality as seen with female professors. This suggests that there is a higher standard for availability and personal contact expected from female professors over their male counterparts. The study concluded that the differences in the ratings might be attributed the difference in expectations students have based on traditional gender roles. Because the female gender role includes warmth and emotional support, students may expect female professors to be more available. The traditional male gender role does not include this criterion and therefore students would not necessarily expect high availability and helpfulness from a male professor.

Following up on Bennet’s research, Basow and Silberg (1987) found that despite the interaction of individual student gender and professor gender, both male and female students rated female professors lower on Instructor-Individual Student Interaction. This measure involved questions related to a professor's availability to students and their contact in and out of
the classroom. This study provides further evidence that students expect more time and interaction from a female professor.

Bachen, McLoughin & Garcia (2003), conducted another study in an effort to understand the effect that gender schema has on student’s evaluations of professors, found similar results despite a very different methodology. Previous studies gave students lists of qualities or categories of qualities and asked them to rate their importance. This study employed an open ended written response task where students were allowed to respond with anything they felt influenced their evaluation of their instructor. When analyzing the written response question, Bachen et al. found that female professors received more written feedback responses in general than did their male counterparts regardless of the positive or negative nature of the evaluations. The tone of these evaluations also differed; in particular, female professors received more feedback regarding their emotional support of students, the perception of whether or not they care about students and their accessibility than did male professors. This finding also supports the notion that students pay more attention to the qualities that are associated with a professor’s gender role.

These studies raised an interesting question about traditional gender roles. Traditional female gender roles dictate that a female should be warm, caring, and provide emotional support, whereas, the male gender role is more concerned with professionalism, competency and authority (Eagly, 2010). It appears that students may have incorporated their ideas about gender roles into their evaluations. The positive and negative responses to female instructors often concerned expectations that are directly dictated by traditional gender roles. When a student felt
that a female professor provided the warmth and emotional support expected, this was commented on. Conversely, if these female gender markers were absent, this also drew comments from students. The comments for male professors did not include as many remarks about personal warmth, availability, or eagerness to help. The 2008 study by Silva et al. established that these qualities were highlighted as important traits of students’ favorite professors, but it appears to more consciously affect students’ evaluations when evaluating a woman (Bachen et al., 2003). The manipulation in this experiment highlighted qualities that are associated with gender roles, mainly helpfulness and availability for females. If it is only the contradiction of gender roles that drives negative female evaluations; then professionalism should be rated equally for all women, regardless of the instruction style manipulation.
HYPOTHESES

• H1a: Students will rate female professors as significantly less helpful than their male counterparts.

• H1b: Students will rate strict professors as significantly less helpful than professors with permissive policies.

• H1c: The gender inequality for ratings of helpfulness will be more pronounced when policies are strict. In other words, there will be an interaction between instruction style and gender. Specifically, female professors will be rated as much less helpful when they have strict policies compared to male professors with the same policies.

• H2a: Students will rate female professors as significantly less available than their male counterparts.

• H2b: Students will rate strict professors as significantly less available than professors with permissive policies.

• H2c: The inequality in ratings of availability will be more pronounced when policies are strict. In other words, there will be an interaction between instruction style and gender. Specifically, female professors will be rated as much less available when they have strict policies compared to male professors with the same policies.

• H3a: In open ended responses, students will use more negative emotion words when responding to a strict female instructor than a strict male instructor.
• H3b: In open ended responses, students will use more negative emotion words when responding to a strict instructor than a permissive instructor.

• H3c: The inequality in negative emotion words will increase substantially for strict female professors such that there will be an interaction between instruction style and gender on proportion of negative emotion words. Specifically, the proportion of negative emotion words will increase more dramatically for female professors with strict policies compared to the increase for male professors.

• H4a: Students will rate male professors as more professional than female professors.

• H4b: There will be no change in professionalism ratings across instruction type in the female conditions.
Methods

Participants

Participants consisted of 52 volunteer undergraduate psychology students participating for extra credit in a psychology course. Participants were recruited through the SONA system. Participants were primarily female (67%) and the majority (78%) of students were aged 18-24. Most (69%) reported being Caucasian and 73% were psychology majors.

Materials

Demographics

Demographics were collected using a form created for this experiment. This form asked for year in college, major, gender of participant, age, and ethnicity and is included in the appendices.

Syllabi

Four hypothetical syllabi were also created for use in this experiment. Policies were pulled from syllabi previously used in undergraduate courses. The gender of the professor, as well as their teaching style was varied in each condition. The four conditions consisted of a female professor using a permissive style, a male professor using the permissive style, a female professor using a strict instruction style, or a male professor using a strict instruction style.

Instructions styles were represented by the use of indefinite versus definite language in the wording of policies on each of the syllabi. The following is an example of a strict policy characterizing a strict instruction style: “I never accept late assignments; turn your work in on time for credit.” The permissive teaching style is represented by indefinite language in the same policy such as: “I may accept late work on a case by case basis; please try to turn your work in on time for credit.” This difference in policy concerning office availability was designed to vary
the access a student would potentially have to a professor, limit the relationship building possibilities and also vary the level of helpfulness that the students would perceive.

The subject of the course was chosen as a required general education course for psychology majors so that individual interest in the subject matter and difficulty of the subject would not affect participants’ feelings about taking the course. Students who have previously taken the course were instructed to disregard this fact, and rate the class as if they had not taken it previously.

**Professor Evaluations** Follow up questions were designed using feeling words to make participants feel comfortable replying with an emotional response. These questions range from yes/no questions to short written response requiring explanations and included gender pronouns whenever possible to emphasize the gender of the professor in each condition. Gender is emphasized in the questions as this variable would be readily apparent if students attended a semester of class with the professor. As there is no interactive component, personal experience, nor first person biopic information provided within the syllabi, it is necessary to compensate for this by adding gender emphasis in the evaluation questions. Likert scale questions were added to examine how helpful and available the student felt their given professor would be. Example questions include, “*How do you feel about taking his/her course?*” and “*How available do you feel he/she would be?*” Filler questions will be interspersed into the follow up questions to deemphasize the emotional aspect such as, “*Would you take his/her course/Why or why not?*” A final manipulation check question is added to the follow up questions to ensure participants
ascertained the gender of their chosen professor “Was this course taught by a man or a woman?”

Procedure

Participants logged in to the University of Central Florida SONA System for online research participation. They then selected the study link to participate. Upon arrival at the site they were provided with a summary of research document for review. After acknowledging the summary of research document electronically, each participant was presented with the demographic survey provided in the appendices. Upon selecting their gender the survey automatically split the subjects into a male group and a female group and then randomized each group into one of the four conditions. This was done to prevent a stronger presence of one gender appearing in any one condition. This could have occurred if only one randomization across all genders was done. Previous research has shown that an interaction can occur between gender of the student and gender of professor such that male students rate female professors lower overall and female students rate female professors higher overall (Bachen et al., 2003). The separate randomization of participants by gender was necessary to avoid skewing data based on that factor alone. After being randomized, each participant was presented with one of four hypothetical syllabi for an undergraduate course. Participants were asked to read their assigned syllabi thoroughly and understand the policies of the course. Participants were then asked the series of follow up questions regarding their feelings toward the instructor and whether or not they would elect to take the course in question. Students provided open ended written responses in the text boxes provided within the survey site and were given unlimited time to respond to each question.
Deception was used in that students were not told about the gender differences of the conditions prior to participating. They were told only that they are to evaluate the professor based on policies and instruction style. At the conclusion of participation they were provided with a debriefing form explaining the gender manipulation and the role it played in the experiment. Participants had the option to opt out of the experiment at any time.
Results

Two 2 (gender of instructor) X 2 (style of instruction) between subjects ANOVAs were conducted with student evaluations as the dependent measures. Helpfulness and Availability were grouped into one analysis; the second analysis examined emotion word usage in the short answer passages provided. An alpha level of .05 was applied to all analyses.

Hypothesis 1: Helpfulness

The analysis of helpfulness ratings confirmed all three hypotheses. The means and standard deviations per group are reported in Table 1.

<table>
<thead>
<tr>
<th>Instruction Type</th>
<th>Gender of Professor</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permissive</td>
<td>Male</td>
<td>4.70</td>
<td>0.48</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>4.25</td>
<td>1.36</td>
</tr>
<tr>
<td></td>
<td>Both Genders</td>
<td>4.45</td>
<td>1.06</td>
</tr>
<tr>
<td>Strict</td>
<td>Male</td>
<td>3.17</td>
<td>1.27</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>1.39</td>
<td>0.78</td>
</tr>
<tr>
<td></td>
<td>Both Genders</td>
<td>2.10</td>
<td>1.32</td>
</tr>
<tr>
<td>All Instruction Types</td>
<td>Both Genders</td>
<td>3.10</td>
<td>1.68</td>
</tr>
</tbody>
</table>

There was a main effect of gender for ratings of helpfulness such that female instructors were rated lower overall than their male counterparts, $F (1, 48) = 14.700, p < .001, \eta_p^2 = .24$, confirming Hypothesis 1a. There was also a main effect of strictness on ratings of helpfulness such that strict instructors were rated substantially lower than were permissive instructors, $F (1, 48) = 57.197, p < .001, \eta_p^2 = .52$, confirming Hypothesis 1b. Moreover, there was an interaction
for ratings of helpfulness such that female instructors were rated substantially lower when they were strict than their male counterparts, $F(1, 48) = 5.222, p = .027, \eta^2_p = .098$. The simple main effect comparing the means for strict female instructors to strict male instructors was significant, $F(1, 48) = 21.768, p < .001$. However, there no gender differences in helpfulness were observed when both were permissive, $F(1, 48) = 1.391, p = .24$. Thus, Hypothesis 1c was confirmed.
Figure 1.

Interaction of gender and instruction style on helpfulness ratings.
Hypothesis 2: Availability

For ratings of availability Hypotheses 2a and 2b were confirmed. There was a main effect of gender for ratings of availability such that female instructors were rated lower overall than their male counterparts, $F(1, 48) = 15.304, p < .001, \eta^2_p = .24$, conforming Hypothesis 2a. There was also a main effect of strictness such that strict instructors were rated substantially lower than permissive instructors, $F(1, 48) = 43.940, p < .001, \eta^2_p = .48$, confirming Hypothesis 2b. Additionally, Hypothesis 2c was not supported; there was not a significant interaction between gender and instruction style for ratings of availability, although the means followed the same patterns as the ratings for Helpfulness $F(1, 48) = 3.215, p = .078, \eta^2_p = .06$. However, the simple main effect comparing gender in the strict condition was significant, $F(1, 48) = 45.731, p < .001$, providing some support for Hypothesis 1c. This confirms the next portion of the research hypothesis that strict female professors received lower ratings than their strict male counterparts on availability in addition to helpfulness. Means and standard deviations by group are reported in Table 2.

Table 2
Mean scores of availability as a function of gender and instruction type.

<table>
<thead>
<tr>
<th>Instruction Type</th>
<th>Gender of Professor</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permissive</td>
<td>Male</td>
<td>4.9</td>
<td>.32</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>4.25</td>
<td>1.67</td>
</tr>
<tr>
<td></td>
<td>All Genders</td>
<td>4.55</td>
<td>1.06</td>
</tr>
<tr>
<td>Strict</td>
<td>Male</td>
<td>3.42</td>
<td>1.31</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>1.67</td>
<td>2.7</td>
</tr>
<tr>
<td></td>
<td>All Genders</td>
<td>2.37</td>
<td>1.4</td>
</tr>
<tr>
<td>All Instruction Types</td>
<td>All Genders</td>
<td>3.29</td>
<td>1.66</td>
</tr>
</tbody>
</table>
Figure 2.
Availability rating as a function of gender and instruction style
Hypothesis 3: Emotion Word Usage

For analysis of emotional content, both short answer questions were combined into one text and analyzed as a single unit. Language analysis was performed on the short answer responses using LIWC (Linguistic Inquiry and Word Count) Software to assess the percentage of emotion words participants used. LIWC recognizes approximately 80% of words in a text sample, the other 20% is comprised of proper nouns and infrequently used words (Newman, 2008).

For negative emotion words, there was a main effect of gender, $F(1, 48) = 4.323, p = .043, \eta_p^2 = .08$, such that comments for female instructors included significantly more negative emotion words, supporting Hypothesis 3a. Hypothesis 3b was strongly supported by a main effect of instruction type, $F(1, 48) = 11.118, p = .002, \eta_p^2 = .19$, such that comments for strict instructors had an average of 1% more negative emotion words. Although the interaction of gender and instruction did not provide support for Hypothesis 3c at an alpha level of .05, the interaction effect approached significance, $F(1, 48) = 3.917, p = .054, \eta_p^2 = .08$. When female professors were strict, negative emotion words increased by about 3.5% per essay compared to when they were permissive, whereas the proportion of negative words for male professors increased less than 1%. The simple main effect comparing strict female instructors to strict male instructors was statistically significant, $F(1, 48) = 9.557, p = .003$. The means and standard deviations by group are reported in Table 3.
<table>
<thead>
<tr>
<th>Instruction Type</th>
<th>Gender of Professor</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permissive</td>
<td>Male</td>
<td>.52</td>
<td>.88</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>.58</td>
<td>.90</td>
</tr>
<tr>
<td></td>
<td>All Genders</td>
<td>.55</td>
<td>.87</td>
</tr>
<tr>
<td>Strict</td>
<td>Male</td>
<td>1.42</td>
<td>1.88</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>4.11</td>
<td>3.5</td>
</tr>
<tr>
<td></td>
<td>All Genders</td>
<td>2.7</td>
<td>3.25</td>
</tr>
<tr>
<td>All Instruction Types</td>
<td>All Genders</td>
<td>1.98</td>
<td>2.78</td>
</tr>
</tbody>
</table>
Figure 3.

Mean percentages of negative emotion words used and a function of gender and type of instruction.
Hypothesis 4: Professionalism

A Chi Square analysis was used to determine whether or not there were differences on one question, “Do you feel that he/she is professional.” The result of the Chi Square analysis was significant, $\chi^2(3) = 22.309, p < .01$. The category perceived as most professional was the permissive male professor at 100% followed by the strict male professor at 80%. However, only 75% found the permissive female professor to be professional whereas a mere 27% found the strict female professor to be professional. These findings support Hypothesis 4a, men were rated as more professional than women but do not support Hypothesis 4b, female professors were rated less professional when they were strict than when they were permissive.
Discussion

The purpose of this experiment was to extend previous findings of gender inequalities in student evaluations by varying the strictness of the instructors’ policies. Varying the strictness was proposed to deliberately manipulate qualities that are commonly associated with the traditional female gender role. If students were rating women lower because of the violation of gender roles, then strict females should have scored lowest on helpfulness and availability but the professionalism score for females should have remained unaffected by the instruction style manipulation.

The findings are consistent with prior research conducted by Bennet (1982) and Basow and Silberg (1987), in both studies, students rated female professors lower on both helpfulness and availability, as seen in this study. This was expected based on the higher expectation for both qualities inherent in the female gender role.

With regard to the instruction style manipulation, strict female professors received the lowest ratings for all three traits tested, as well as the most negative emotional feedback in free response. It appears that female professors were not redeemed by fulfillment of a male gender role. Despite having identical policies, male professors were perceived as more professional than female professors. There was an additional interaction such that women were rated even lower for professionalism if they were strict. If previous assertions that gender role violations are driving the lower ratings for women hold true, this finding should not have emerged. Because
professionalism is not part of the female gender role, students should not hold female professors to a higher standard than men for this trait. Yet they did. These findings suggest that gender role violations are not the only concern for lower ratings. It appears that female instructors are not only rated more harshly for violating their own gender roles, but they are held to a higher standard for qualities that are typically associated with male gender roles as well.

The strength of the present research is that it demonstrates that gender role violations are not the only reason that female professors are rated less effective. By limiting the exposure to the professor to an online syllabus, all personality variables regarding the professor were negated and the students were left only with policy differences that were either in line with, or deliberately against traditional gender roles. Given the control this manipulation provides, the fact that findings outside of those expected based on gender roles lends credence to the fact that this is not the only concern students have when rating a female professor.

Additionally, few studies have explored the content of student comments. No explanation can be offered at this time for why students had a more negative emotional reaction to female professors. But this result supports the overall finding of a bias against female instructors.

Because student evaluations are often used to make career decisions for professors, and are sometimes the only empirical feedback that administrators receive to gauge how well a professor is performing, these findings are cause for concern (Frick, Chadha, Watson, & Zlatkovska, 2009). If students are not basing their evaluations equally, then the potential for a disadvantage for one group of professors exists. This becomes particularly difficult when the
interaction of strictness and gender is examined. Although a professor may be equally qualified, and legitimately as effective as another instructor, the student evaluations collected may not reflect this accurately, if the professor in question is a strict female. More research will need to be done to understand this effect in current evaluations, or create an evaluation method that is not subject to this bias.

These findings are limited by the small sample size. While the findings were significant, and consistent with previous findings, a larger sample will need to be collected to confirm these results. The sample tested also consisted primarily of undergraduate psychology students. This convenience sample may not be representative of the university population as a whole. There is also a possibility that the participants held a strong gender bias that was responsible for the difference in ratings. This would not be specific to college professors, but students would always rate women lower, regardless of profession. In order to counteract this effect future research should prescreen applicants with an implicit gender attitude test and a gender schema perception scale to rule out this possibility. Lastly, while this study diminishes the probability that the lower ratings for females are a result of a violation of gender roles, it does not identify what is driving the ratings. In the future a more complete view of why students rate female professors lower will be needed. A more thorough examination of which aspects of traits affect each rating most may lend insight. If students provided feedback as to why they rated professors the way they did, perhaps a less biased method of instructor evaluation could be created.

Overall this research gives insight into the relationship between professors’ gender, instruction style and their resulting evaluations. Identifying this bias is an important step towards
equalizing the way that male and professor females are evaluated. If a more neutral evaluation process can be developed, then student evaluations can continue to be used reliably to administer salary increases and gauge overall professor efficacy.
APPENDIX A: IRB APPROVAL LETTER
Appendix A

Approval of Exempt Human Research

From: UCF Institutional Review Board #1
FWA00000351, IRB00001138

To: Shannon N. Whitten

Date: February 27, 2013

Dear Researcher,

On 2/27/2013, the IRB approved the following activity as human participant research that is exempt from regulation:

Type of Review: Exempt Determination
Project Title: Student Perception of Their Instructors
Investigator: Shannon N. Whitten
IRB Number: SBE-13-05097
Funding Agency: n/a
Grant Title: n/a
Research ID: n/a

This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made and there are questions about whether these changes affect the exempt status of the human research, please contact the IRB. When you have completed your research, please submit a Study Closure request in IRIS so that IRB records will be accurate.

In the conduct of this research, you are responsible to follow the requirements of the Investigator Manual.

On behalf of Sophia Dziwoksik, Ph.D., L.C.S.W., UCF IRB Chair, this letter is signed by:

Signature applied by Patricia Davis on 02/27/2013 09:53:57 AM EST

IRB Coordinator
APPENDIX B: EXPLANATION OF RESEARCH
Appendix B

EXPLANATION OF RESEARCH
Title of Project: Student Perception of Their Instructors.
Principal Investigator: Dr. Shannon Whitten
Other Investigators: Courtney Christovich

You are being invited to take part in a research study. Whether you take part is up to you.

• The purpose of this study is to understand the ways that a professor's instruction method and attitude effect students' perception of the class difficulty and their decisions about whether or not to take a class.

• You will be asked to read the policies section of a hypothetical syllabus for a course and write written responses regarding how you feel about the professor's policies and demeanor. You will also be asked a series of questions about how you would feel about taking the course and whether or not you would enroll. You can write as much as you like and this is not timed per se, but it is not expected that you take more than 60 minutes to complete this. It is important to note that there are no right or wrong answers to any part of this experiment. Although this experiment is not timed, it is not expected to take more than 1 hour. We have offered a maximum of 1.5 hours, however, so that you do not feel rushed to complete the experiment. Your only responsibility is to do the best that you can on each of the tasks. You do not have to answer every question or complete every task. You will not lose any benefits if you skip questions or tasks.

You must be 18 years of age or older to take part in this research study.

Study contact for questions about the study or to report a problem: If you have questions, concerns, or complaints, or think the research has hurt you, talk to Courtney Christovich, Undergraduate Student, Psychology Department by email at courtneychristovich@knights.ucf.edu.

IRB contact about your rights in the study or to report a complaint: Research at the University of Central Florida involving human participants is carried out under the oversight of the Institutional Review Board (UCF IRB). This research has been reviewed and approved by the IRB. For information about the rights of people who take part in research, please contact: Institutional Review Board, University of Central Florida, Office of Research & Commercialization, 12201 Research Parkway, Suite 501, Orlando, FL 32826-3246 or by telephone at (407) 823-2901.
Appendix C

Demographic Survey

Age*

[ ] 18-24
[ ] 25-34
[ ] 35-54
[ ] 55+

Race/Ethnicity
[ ] Asian/Pacific Islander
[ ] Black/African-American
[ ] Caucasian
[ ] Hispanic
[ ] Native American/Alaska Native
[ ] Other/Multi-Racial
[ ] Decline to Respond

4) Year in College*
[ ] Freshman
[ ] Sophomore
[ ] Junior
[ ] Senior

5) Major*
[ ] Business/Accounting
[ ] Communications
[ ] Education
[ ] Engineering / Architecture
[ ] Finance
[ ] Fine Arts
[ ] Marketing / Market Research / Public Relations
[ ] Performing Arts
[ ] Political Science
[ ] Psychology
[ ] Sociology
[ ] Sciences
[ ] Undeclared
[ ] Other

6) Gender*
( ) Male
( ) Female
Appendix D

Syllabus

PSY 2012 General Psychology
Mondays and Wednesdays, 9:00 – 10:50 Room 208

Instructor: Dr. Jason or (Jennifer) A. Wright
E-mail: jason.wright@ucf.edu or (Jennifer.wright@ucf.edu)
Office Number: 227, Psychology Building
Office Hours: Mondays, 12:00 – 4:00 and by appointment
Course Description: In this course we will discuss the basic theories of psychology as well as anatomy of the nervous system.

General Policies

• Attendance will be taken regularly at the beginning of class.
• I expect that you will be on time to class; the door will be locked at 9am each class period.
• I never accept late assignments; turn in your work on time for credit.
• I never give make up exams; if you must miss an exam please see the withdrawal deadline.
• I will not answer questions about a lecture you did not attend. • There is no texting during my class.
• Laptops are prohibited in my classroom.
• No food is allowed in my classroom under any circumstances.
• There is no talking during lecture unless it is a question posed to the instructor.

Personal Responsibility
You are responsible for your grade in this class. You will receive a grade that is reflective of the amount of work you put into this class. I am available during office hours to answer specific questions about the material, but not to repeat my entire lecture. Do not show up to office hours without specific questions in hand. Office visits will be limited to 15 minutes per visit. Lastly, if you violate any of my class policies I reserve the right to ask you to leave my classroom or office at any time.

Lecture Notes: Cannot be found on the course web-site. If you miss a lecture, it is your responsibility to get the notes from a classmate.

Grades: Grades will come from 3 sources: Homework, Participation, and Exams.
The breakdown of grades is as follows:
50% Homework 500 points
40% Exam(s) 400 points
10% Participation 100 points

Grading Scale:
A 90 –100% 900 – 1000 points
B 80 – 89% 800 – 899 points
C 70 – 79% 700 – 799 points
D 60 – 69% 600 – 699 points
F under 60% under 600 points

34
APPENDIX E: STRICT CONDITION FOLLOW UP QUESTIONS
Appendix E: Strict Condition Follow Up Questions

Follow Up Questions

Now that you have completed reading the syllabus for Dr. Jason (or Jennifer) Wright, please answer the following questions about his course. For short answer questions, provide any thoughts or feelings you have. For ranking questions, rank your impressions of him using the scales given.

How would you feel about taking his (or her) course?

Would you take his (or her) class?
( ) Yes
( ) No

Do you feel he (or she) would be available to you?
( ) Not Available
( ) Somewhat Unavailable
( ) Somewhat Available
( ) Usually Available
( ) Very Available

How helpful do you feel he (or she) would be to you?
( ) Not helpful at all
( ) Somewhat unhelpful
( ) Helpful
( ) Somewhat helpful
( ) Very Helpful

Do you feel that he (or she) is professional?
( ) Yes
( ) No

How do you feel about his (or her) policies regarding the course?

Was this professor a man or a woman?*
( ) Man
( ) Woman
Appendix F: Permissive Condition Syllabus

Syllabus

PSY 2012 General Psychology

Mondays and Wednesdays, 9:00 – 10:50 Room 208

Instructor: Dr. Jason (or Jennifer) A. Wright
E-mail: jason.wright@ucf.edu (or Jennifer.wright@ucf.edu)
Office Number: 227, Psychology Building
Office Hours: Mondays, 12:00 – 4:00 and by appointment
Description: In this course we will discuss the basic theories of psychology as well as anatomy of the nervous system.

General Policies

• Attendance will not be taken regularly; it is up to you whether to attend.
• Please try to be on time to class.
• I may accept late work on a case by case basis; please try to turn your work in on time for credit.
• I give make up exams in certain circumstances; if you must miss an exam please see me before the exam day.
• I will be glad to answer questions about a lecture you did not attend, as long as, you have specific questions.
• Please try to keep texting to a minimum during my class.
• Laptops are allowed in my classroom; please try to restrict use to academic purposes.
• Food is allowed in the classroom as long as it is not disruptive.
• Please try to keep talking to a minimum during lecture.

Personal Responsibility

You are responsible for your grade in this class. You will receive a grade that is reflective of the amount of work you put into this class, but I am more than happy to offer help whenever possible. I am available during office hours to answer any questions about the material, but please do not ask for my entire lecture. I will spend as much time as necessary to make sure that you are comfortable with the material. Lastly, please try to abide by all class policies so that all students have a disruption free environment in which to learn.

Lecture Notes: Are available on the course web-site. If you miss a lecture, you may print out the notes or get them from a classmate.

Grades: Grades will come from 3 sources: Homework, Participation, and Exams.
The breakdown of grades is as follows:
50% Homework 500 points
40% Exam(s) 400 points
10% Participation 100 points

Grading Scale:
A 90 –100% 900 – 1000 points
B 80 – 89% 800 – 899 points
C 70 – 79% 700 – 799 points
D 60 – 69% 600 – 699 points
F under 60% under 600 points
APPENDIX G: PERMISSIVE CONDITION FOLLOW UP QUESTIONS
Appendix G

Follow Up Questions

Now that you have completed reading the syllabus for Dr. Jason (or Jennifer) Wright, please answer the following questions about his course. For short answer questions, provide any thoughts or feelings you have. For ranking questions, rank your impressions of him using the scales given.

**How would you feel about taking his (or her) course?**

**Would you take his (or her) class?**
( ) Yes
( ) No

**Do you feel he (or she) would be available to you?**
( ) Not Available
( ) Somewhat Unavailable
( ) Somewhat Available
( ) Usually Available
( ) Very Available

**How helpful do you feel he (or she) would be to you?**
( ) Not helpful at all
( ) Somewhat unhelpful
( ) Helpful
( ) Somewhat helpful
( ) Very Helpful

**Do you feel that he (or she) is professional?**
( ) Yes
( ) No

**How do you feel about his (or her) policies regarding the course?**

**Was this professor a man or a woman?**
( ) Man
APPENDIX I: DEBRIEFING STATEMENT
Debriefing Statement

Dear Participant;

During this study, you were asked to read a syllabus and write responses about your feelings toward the professor and their instruction style. You were told that the purpose of the study was to examine the effect of a professor’s instruction style on your perception of that professor and your willingness to take their course. The actual purpose of the study is to correlate the emotion words used when responding to different instruction styles, as well as the effect that the gender of the professor has on the student’s reaction to the instruction method. When you answered your demographic study at the beginning of the experiment, you were randomly divided into one of four groups based on your gender. This practice was to ensure that we had an equal representation of gender in each of the four experiment groups. Without this practice, an overrepresentation of male or female students in any one group could have clouded our results.

We did not tell you everything about the purpose of the study because we did not want to influence your feelings about the gender of your professor in the syllabus you read. We also did not want you to be aware of the other gender groups within the experiment. By not informing you that gender of your professor was randomly assigned, we hoped to prevent you from reacting consciously regarding the gender of your selected professor.

The responses in this study are de-identified and cannot be linked to you. If you have any concerns about your participation or the data you provided in light of this disclosure, please discuss this with us. We will be happy to provide any information we can to help answer questions you have about this study.

Study contact for questions about the study or to report a problem: If you have questions, concerns, or complaints or think the research has hurt you, please contact Courtney Christovich by email at courtneychristovich@knights.ucf.edu

IRB contact about your rights in the study or to report a complaint: Research at the University of Central Florida involving human participants is carried out under the oversight of the Institutional Review Board (UCF IRB). This research has been reviewed and approved by the IRB. For information about the rights of people who take part in research, please contact: Institutional Review Board, University of Central Florida, Office of Research & Commercialization, 12201 Research Parkway, Suite 501, Orlando, FL 32826-3246 or by telephone at (407) 823-2901.

Please again accept our appreciation for your participation in this study.
References


