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### **ABSTRACT**

The question of whether clinical faculty members at the Southern College of Optometry treat students differently on the basis of gender was investigated. Of the 21 full-time faculty members, 14 completed a survey using short scenarios to evaluate gender bias. Findings indicate that the respondents appeared to provide equal and unbiased treatment of students of both sexes. However, the conclusions are based on only 70% of the faculty and the data were collected with a survey that has not been scientifically validated as a reliable measure of gender-biased attitudes. The two versions of the survey, each consisting of three scenarios, are appended. (SW)



# Optometric Education At The Southern College of Optometry: Is It Gender Biased?

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Running head: Gender Bias

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### ABSTRACT

The purpose of this study was to determine if the clinical faculty members at the Southern College of Optometry treated students differently on the basis of gender. All but one of the twenty-one full-time faculty members were presented with a survey instrument utilizing short scenarios to evaluate gender bias. Seventy percent of the faculty members responded to the survey. A Chi-Square value of 21.952 was calculated from the data which significantly exceeded the critical Chi-Square at the .001 level. On the basis of this, it was concluded that the clinical faculty members do not use gender as a criterion for differentially dealing with students. The important ramifications of the study, as well as potential threats to its validity, are discussed.



# Optometric Education At the Southern College of Optometry: Is it Gender Biased?

During the last ten years, there has been a phenomenal influx of women into the profession of optometry. For many, the Southern College of Optometry has been the school of choice in their effort to develop and refine their professional skills.

At the same time, the clinic faculty of the College has remained distinctly masculine. According to the 1985 student handbook, figures at the beginning of the 1985-86 school year revealed that eighty percent of the clinic faculty were men.

The framework of this research lies in examining the relationship which exists between an increasing number of female students and a predominately male clinical faculty. The obvious question, in light of the current faculty composition, is whether or not female students are treated any differently than their male colleagues.

One of the most significant aspects of this study lies in its relationship to the enrollment trends at the Southern College of Optometry. As enrollments have fluctuated, the College has been faced with tuition increases which have reached a point of diminishing returns. One of the obvious solutions to this current situation is to increase recruitment efforts among non-traditional student populations. It is at



this point that the findings of this study become most critical. Since women comprise the minority which has made the greatest gains, they are also the most likely to encounter opposition from within the traditional educational setting. For this reason, a study involving sexual bias seemed more appropriate than the use of other discriminatory criteria.

A review of the current optometric literature reveals a minimal amount of information in regards to sexual bias in schools and colleges of optometry. There are, however, studies involving related health care disciplines, as well as educational and societal institutions in general.

Hull (1982), in a study relating to the medical profession, states that "sexism is a two-edged sword; it hurts both women and men alike by excluding each from certain spheres of experience that are thought reserved for the other." This philosophy, although relatively unresearched in optometry, is not completely embraced within medicine and nursing. As a result, attempts to research the problem have often yielded unexpected and conflicting data.

As an example, a study by Fenner (1980) concluded that nurses were more likely to receive abusive treatment from female physicians than from male physicians. The results of this study are supported, in part, by the findings of Scott and Brantley (1983) who researched the phenomenon and found that sex-difference knowledge does not guarantee non-sexist attitudes.



Although there is currently a void in the research regarding faculty attitudes towards women in schools and colleges of optometry, associated evidence would indicate that gender bias is a reality among practicing optometrists. Miller (1985) quotes a 1974 Health, Education, and Welfare report which suggests that journals tend to isolate women doctors from the mainstream and to feminize their achievements. Isolation is also evident in the area of optometric leadership. Miller goes on to point out that, since 1920, only one woman has ever served on the board of trustees of the American Optometric Association.

## Method

Subjects. At the time of the study, the clinical facilities of the Southern College of Optometry were staffed by twenty-one full-time faculty members. Sixteen were male and five were female. The oldest faculty member had been on staff since 1969 and the youngest since the summer of 1985. All of the staff possessed earned doctoral degrees in optometry and were currently licensed to practice in the state of Tennessee.

Twenty of the twenty-one faculty members were included in this study. The one exception was the researcher who was also a full-time faculty member.



Procedures. In order to quantify the attitudes of the faculty, a survey instrument was developed which used short scenarios to depict student/faculty interactions. The faculty members were then asked whether they agreed or disagreed with the events portrayed in each scenario and why.

Two versions of the survey were developed (see Appendices A and B). Both versions consisted of three scenarios, each of which was intended to portray a different area of student life where gender bias might possibly occur. The areas in question concerned grading policies, clinical skills, and collegiality.

In version one (see Appendix A), the first and third scenarios were worded so as to reflect biased attitudes and actions, while the second scenario was unbiased. The pattern was reversed in version two (see Appendix B). Two versions were deemed necessary in order to provide an even distribution of both biased and unbiased scenarios to the subjects.

In an attempt to make the survey instrument as effective as possible, the researcher pre-tested it with four didactic faculty members who would not be part of the actual study. Their comments and insights resulted in several revisions of the scenarios and, ultimately, to the versions listed in Appendices A and B.



Ten surveys of version one were mix with ten surveys of version two and randomly assigned to the subjects. The surveys were distributed to the faculty members through the campus mail system and were accompanied by a cover memo from the researcher.

Results: During the course of the study, fourteen of the twenty surveys were returned to the researcher. Of the surveys returned, eight were version one and six were version two. Due to the potentially sensitive nature of the study, no attempt was made to follow up on those faculty members who decided not to participate.

In analyzing the data, the null hypothesis was assumed. A 2 x 2 contingency table was then developed by cross-matching the biased and unbiased scenarios with the faculty's agreement or disagreement with them. A Chi Square value of 21.952 was calculated from the table.

Ensert Figure 1 about here



Because the calculated Chi Square value significantly exceeded the critical Chi Square, the null hypothesis was rejected. Visual appraisal of the responses indicated that the faculty were strongly unbiased in their attitudes towards male and female students.

The unbiased attitudes of the faculty were further exemplified in the responses to the qualitative portions of the survey. Comments such as "a clear-cut case of sexual discrimination" and "grading policies must always be administered equally and fairly" were listed on several of the surveys returned.

Conclusions. The purpose of this study was to determine if the clinical faculty at the Southern College of Optometry treated students differently on the basis of gender. An analysis of the data collected indicates that the clinical faculty members appear to afford equal and unbiased treatment to students of both sexes. Both quantitative and qualitative responses suggest that the faculty are keenly aware of the need to interact with students in a responsible manner.

<u>Discussion</u>. It must be kept in mind that the outcome of this research may have been influenced by several factors. These are 1) the conclusions are based upon only seventy percent participation by the target population, 2) the data was collected on a survey instrument which



has not been scientifically validated as a reliable measure of gender biased attitudes, and 3) the timing of the survey may have influenced responses because of current student composition.

Additionally, the results of the study are only applicable to the current clinical faculty members at the Southern College of Optometry. Because of the unique and limited population involved in the survey, it is not appropriate to generalize these conclusions to the faculty members of other schools and college of optometry.



Figure 1

Calculated Chi-Square Critical Chi-Square

21.952

10.83\*

\*Confidence level: .001



## APPENDIX A

Please indicate your responses to the actions of the following individuals:

1. Over the past few years, the president of the college has invited the valedictorian of the graduating class to his home for an informal dinner. The top honors in this year's class went to Miss Mary Smith.

	Because he is unmarried, the president feels that it would not be appropriate to invite a single woman to his home and, therefore cancels this year's engagement.
	How do you feel about the president's decision?
	Agree ( ) Disagree ( )
	Why?
2:	Staff Doctor Sam Chandler gave Student Doctor William Smith a grade of 50 for failing to follow an important clinic protocol during the examination of his patient. Later that day, Student Doctor Melinda Adams failed to follow the same clinic protocol. Student Doctor Adams' received a grade of 50 from Staff Doctor Chandler although her management of the patient was, otherwise, correct.
	How do you feel about the Staff Doctor's grading of the two students?
	Agree ( ) Disagree ( )
	Why?
3.	Student Doctor Fred Jones has the lowest scholastic ranking in his class while Student Doctor Judy Fowler has the third highest ranking. On a particular day, both students present a similar case to Staff Doctor Jennifer Turner. Although it is not indicated by the examination, Student Doctor Fowler is requested to retake several of her findings, while Student Doctor Jones' results are accepted without hesitation by Staff Doctor Turner.
	How do you feel about the Staff Doctor's actions?
	Agree ( ) Disagree ( )
	Why?



## APPENDIX B

Please indicate your responses to the actions of the following individuals:

1. Over the past few years, the president of the college has invited the valedictorian of the graduating class to his home for an informal dinner. The top honors in this year's class went to Miss Mary Smith. Even though he is unmarried, the president feels that it would still be appropriate to invite a single woman to his home and, therefore, continues with his plans for this year's engagement.

How do you feel about the president's decision?

	Agree	( )	Disagree ( )	
Why	?			
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### BIBLIOGRAPHY

- Deaux, Kay & Taynor, Janet. Evaluation of male and female ability: bias works two ways. Psychological Reports, 1973, 32, 1, 261-262.
- Etaugh, Claire & Sanders, Sharon. Evaluation of performance as a function of status and sex variables. <u>Journal of Social Psychology</u>, 1974, 94, 12, 237-241.
- Fenner, K. M. Ethics and law in nursing. New York, D. Van Nostrand Reinhold Co., 1980, 28-30.
- Goldberg, P. A. Are women prejudiced against women?. <u>Transaction</u>, 1968, 4, 28-30.
- Hull, Richard T. Dealing with sexism in nursing and medicine. Nursing Outlook, 1982, 30, 2, 89-94.
- Miller, Pamela J. We're good for our profession!. Optometric Management, 1985, 8, 26-31.
- Peck, Teresa. When women evaluate women, nothing succeeds like success: the differential effects of status upon evaluation of male and female professional ability. Sex Roles, 1978, 4, 2, 205-213.
- Scott, Judith & Brantley, John C. Development of an inventory of teachers' attitudes towards sex-role stereotyping and knowledge of sex differences. Sex Roles, 1983, 9, 3, 341-353.

