

DOCUMENT RESUME

ED 208 289

CG 015 459

AUTHOR Bean, Glynis; Kidder, Louise H.  
 TITLE Women in Medical School.  
 PUB DATE Mar 81  
 NOTE 13p.; Paper presented at the Annual Convention of the Association for Women in Psychology (8th, Boston, MA, March 5-8, 1981).

EDRS PRICE MF01/PC01 Plus Postage.  
 DESCRIPTORS \*Achievement Need; Females; Goal Orientation; \*Helping Relationship; Higher Education; \*Medical Students; \*Professional Occupations; \*Sex Differences; \*Sex Role; Sex Stereotypes; \*Student Attitudes

ABSTRACT

Research on the characteristics of women in non-traditional fields, e.g., medicine, has yielded complex information in terms of adherence to sex-role stereotypes. To determine whether students' attitudes toward helping and achieving followed sex-role typing and were different at various stages in medical school, 384 male and female oncology students completed questionnaires. Results indicated that female students were more helping- and more achievement-oriented than their male counterparts. Students also gave higher ratings to the importance of helpfulness at the end of their medical schooling, but felt less effective in meeting the needs of cancer patients throughout the schooling period. The findings suggest a need to re-evaluate the sex-role stereotypes of women in medicine. (KMF)

\*\*\*\*\*  
 \* Reproductions supplied by EDRS are the best that can be made \*  
 \* from the original document. \*  
 \*\*\*\*\*

ED208289

Women in Medical School

Glynis Bean and Louise H. Kidder

Temple University

U.S. DEPARTMENT OF EDUCATION  
NATIONAL INSTITUTE OF EDUCATION  
EDUCATIONAL RESOURCES INFORMATION  
CENTER (ERIC)

X This document has been reproduced as  
received from the person or organization  
originating it.  
Minor changes have been made to improve  
reproduction quality.

• Points of view or opinions stated in this docu-  
ment do not necessarily represent official NIE  
position or policy.

PERMISSION TO REPRODUCE THIS  
MATERIAL HAS BEEN GRANTED BY

*Glynis Bean*

TO THE EDUCATIONAL RESOURCES  
INFORMATION CENTER (ERIC)

CG 015459

The purpose of the present study was to investigate whether or not medical students adhere to sex-role stereotypes concerning helping and achieving, and to determine whether these students' attitudes toward helping and achieving are different at the various stages of their medical schooling.

Traditionally and stereotypically, women have been viewed as helpful, nurturant, and emotionally involved individuals who are less competitive than are men. Using medical student samples, it has been found that female medical students score higher than male medical students on nurturance and understanding, whereas male medical students have been found to score higher on dominance and order. Another study found that little difference was perceived between women in general and women in medicine when evaluated by medical students on measures of nurturance and interest in helping others. In contrast, female medical students have been found to rate themselves higher than male medical students on self-confidence and aggression, whereas the males rated themselves higher than the females on nurturance and affiliation. These studies indicate the complexity of this research area. This study was thus designed to further investigate the characteristics of women in non-traditional fields, specifically, in the field of medicine.

Medical school creates special problems for the female student as do other male dominated fields. Several researchers assert that difficulties can be encountered when female medical

students try to (integrate traditionally "masculine" and "feminine" role attributes, or in Bakan's (1964) terms "agentic" versus "communal" orientations, as they assume the responsibilities of physicians. The "agentic" identity demands competence and an achievement orientation, whereas the "communal" identity demands dependence and a helping orientation. The question then becomes, do women medical students chose between these two identities? Are female medical students more concerned than male medical students with helping patients and less concerned than male medical students with achieving in medicine?

The study also investigated the values medical students attach to helping and achieving as they progress through four years of medical school. According to Becker, Geers, Hughes, and Strauss (1961), medical students change in how they view themselves and their work as they advance through medical school. In the first two years, the students spend most of their time in the classroom with extremely limited clinical experience. The next two years introduce a shift from classroom achievement orientation to a practical problem-solving orientation which requires a concomitant change in thinking. After two years of studying for competitive exams, the students begin working with patients and they develop a new set of expectations about what physicians can and should do. Eron (1955) found that during the course of four years of medical school, students showed a significant increase in cynical attitudes and a decrease in the expression of humanitarian feelings, often explained as arising from disillusionment. The issues of helping and achieving in

3

medicine thus have important health care implications, for a physician's ability to satisfy the socio-emotional needs of patients can directly affect the outcome of treatment.

Medical students' attitudes toward oncology as a specialty and their attitudes toward the care of cancer patients were chosen to investigate, for three reasons. First of all, oncology offers vast opportunities for achieving medical breakthroughs. Secondly, it is a specialty which is in need of caring, warm physicians because of the nature of the disease being treated. The psychological needs of the cancer patient are great and nowhere is the need for physicians to be actively concerned with the emotional well-being of their patients more dramatic than in the field of oncology. It was felt that if gender differences exist in attitudes concerning caretaking, these attitudinal differences are likely to be highlighted in oncology. Also, oncology was chosen to study because it is not a sex-typed field, as are pediatrics and urology, in that there are few preconceived sex-role expectations associated with oncologic care.

#### Methods

A 90 item questionnaire was used to measure general achievement and helping orientations and achievement and helping orientations as related to oncology. The questionnaire was comprised of several scales, six of which were chosen for analysis. The scale measuring general achievement orientation, developed by Scott (1965), included items concerning the students' desires to do well in school. Scott's (1965) General Helping scale measured the students' helping orientation not

related to oncology per se. Items included whether or not the students admired in other people utter selflessness in one's actions, helping another person feel more secure, and being kind to other people. The Specialty-Oriented Achievement scale measured the students' attitudes concerning how medically rewarding oncology is, whether oncology is a high status field, whether cancer care can be only palliative, and how pessimistic they were about there being medical break-throughs in oncology in the near future. The Appropriateness of Helping scale included items such as how appropriate the students felt it was for them to help cancer patients with their emotional problems related to their disease, how responsible they felt to meet the psychological needs of cancer patients, and how concerned they were with meeting these needs. The Effectiveness of Helping scale included items such as how effective and confident the students felt in dealing with the psychological problems of cancer patients and how competent and comfortable they were in meeting these needs. The Patient Preference scale included items such as how much the medical students wanted cancer patients to hide their psychological problems from them, how annoyed they are with cancer patients who get upset in front of them, and how much they would mind dealing with cancer patients' psychological problems who are in advanced stages of the disease. The reliability of the scales ranged from .50 to .80. A measure of sex-role orientation was also used.

A total of 267 male and 117 female medical students were recruited from large lecture halls to complete the questionnaire,

with the exception of the senior medical students who were mailed the questionnaire. The respondents represented 48% of the freshman class, 69% of the sophomore class, 46% of the junior class, and 61% of the senior class.

### Results and Discussion

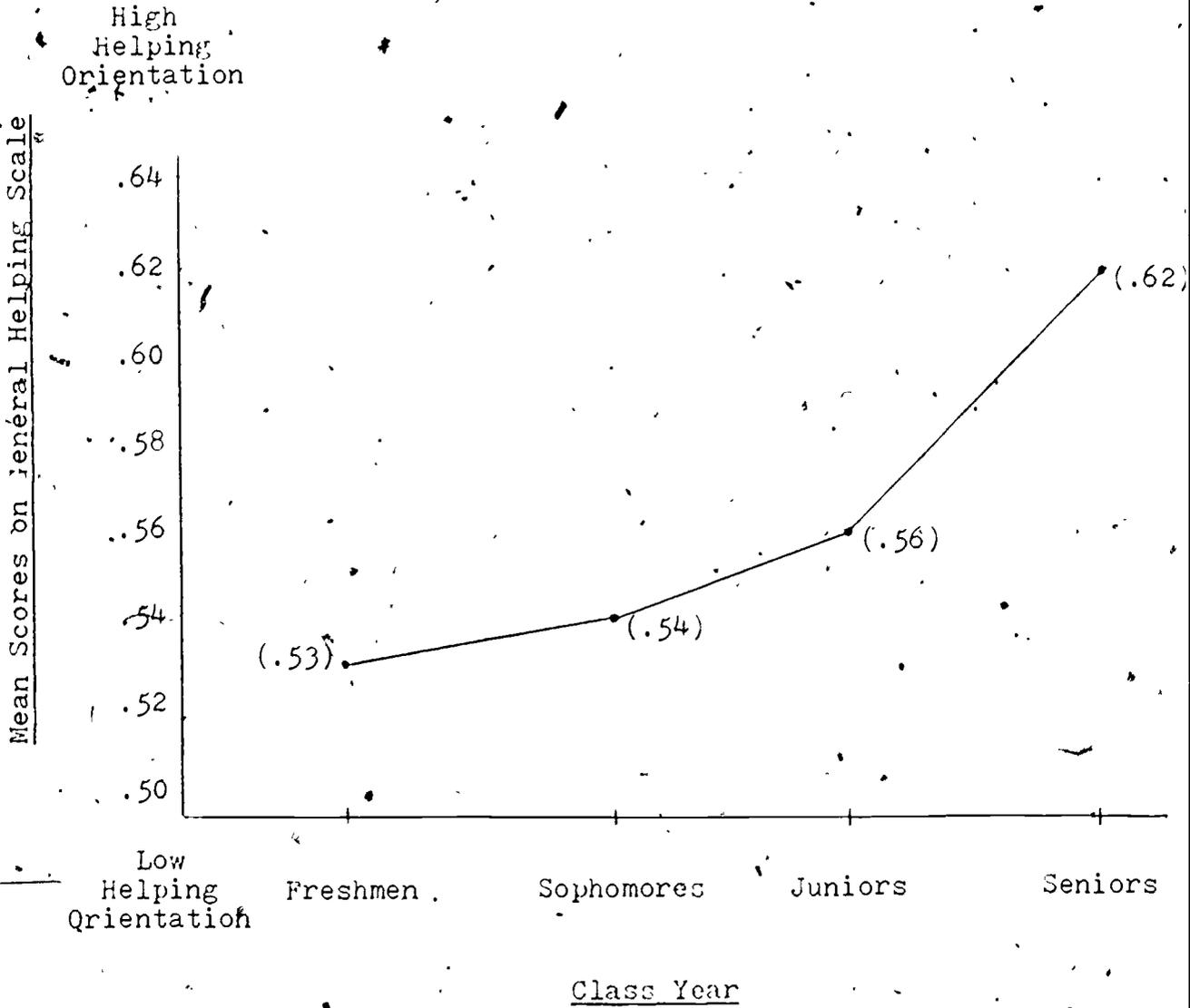
Several significant differences between the male and female students were found. The results indicated that the females were more achievement-oriented in general ( $F(1,382)=9.76, p < .002$ ) and were also more helping-oriented in general ( $F(1,382)=7.03, p < .008$ ) than were the males. Further, the female students were more achievement-oriented as related to oncology than were the male students ( $F(1,382)=3.86, p < .05$ ). That is, the female students were significantly more interested in making medical gains in oncology than were the male students. Moreover, on the Appropriateness of Helping scale, the female students felt that it was appropriate for them to help cancer patients with their psychological needs related to their disease significantly more than felt the male students ( $F(1,382)=13.50, p < .001$ ). The females also preferred communicative, involved patients significantly more often than did the males, as measured by the Patient Preference scale ( $F(1,382)=13.91, p < .001$ ). No gender differences were found on the Effectiveness of Helping scale in terms of how effective the students felt in handling the psychological needs of cancer patients. Could these findings be attributed to the females being more interested in oncology overall than were the males? This was investigated and no gender differences in terms of preference to specialize in medical

oncology were found. From a list of six specialties, medical oncology was ranked third by both males and females as the field which they most wanted to enter.

Sex-role orientation provided some useful information concerning the students' attitudes toward helping and achieving. A correlation of .51 was found between sex-role orientation and achievement striving in oncology. Thus, the more "communal" the individual, the more achievement-oriented he or she was concerning the field of oncology. A .65 relationship was found between sex-role orientation and the Appropriateness of Helping scale, indicating that the more "communal" the individual was, the more appropriate he or she felt it was to help cancer patients with their psychological problems related to their disease. A .65 correlation was also found between sex-role orientation and the Patient Preference scale, thus, the higher the individual scored in "communal" orientation, the more he or she preferred open, involved cancer patients.

Some interesting trends were found when the four classes were analysed across gender. A significant curvilinear relationship was found on the Specialty-Oriented Achievement scale which indicated that the students exhibited low levels of desired achievement strivings in oncology as freshmen, were more interested in oncology-related achievement in their sophomore and junior years, and returned to the freshmen level in the senior year ( $F(2,374)=8.26, p < .0003$ ). A different curvilinear pattern was found for class year on the General Helping Orientation scale (see Figure 1). Freshmen, sophomores,

Figure 1. General Helping scale mean scores by class year.

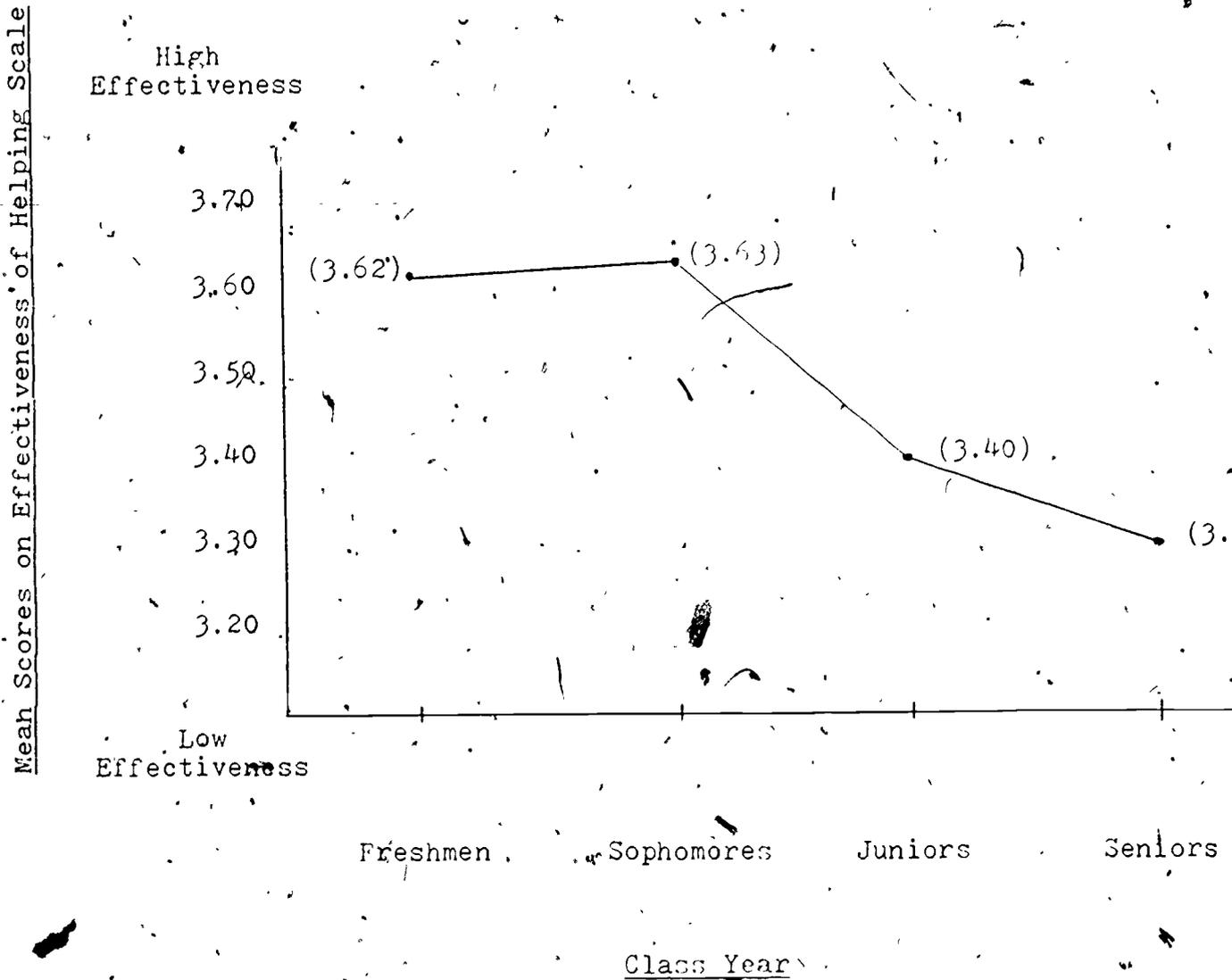


Note. Scores range from 0 to 1.

and juniors were low in helping orientations, whereas the seniors were significantly more helping-oriented than were the other three classes ( $F(2, 382)=3.90, p<.021$ ). Although the students became increasingly more helping oriented by their senior year, the Effectiveness of Helping scale scores (see Figure 2) indicate that these same students felt significantly less effective when it came to helping cancer patients with their psychological problems related to their disease, as they went from the freshman year to the senior year in school. Thus, although the students rated the importance of general helpfulness higher at the end of their medical schooling than at the beginning, they felt significantly less effective in meeting the needs of cancer patients as they progressed through medical school. That these medical students become less achievement-oriented and feel less effective in helping cancer patients as they advance through their four years of schooling has implications for medical education and suggests the need for all medical students to be trained in ways of effectively handling the psychological needs of cancer patients.

Further, the findings indicate that the sex-role stereotype of women being more helping-oriented than are men was supported. The female students, in contrast to their male counterparts, were more helping-oriented in general, felt more strongly that helping cancer patients with their psychological needs was appropriate, and preferred open, involved, disclosing patients. However, although the women advocated being more nurturant, contrary to sex-role stereotypes they were also more achievement-oriented in

Figure 2. Effectiveness of Helping scale mean scores by class year.



Note. Scores range from 1 to 5.

general and as related to oncology than were the men. That is, helping and achieving appear to be compatible goals for these women. The notion that women in medical school are high achievers has received support in that of the accepted applicants to medical school, females tend to score significantly higher than do males on science grades in undergraduate courses and tend to have higher cumulative averages than do male applicants. It appears, then, that women in medical school attempt successfully to integrate both "agentic" and "communal" roles as they assume the responsibilities of physicians. How they manage to do both when they become practicing physicians remains a question for further study.

In conclusion, these findings show that not only were the female medical students more helping-oriented than were the male medical students but, contrary to sex-role stereotypes, the females were also more achievement-oriented than were their male counterparts. Findings such as these call for a re-evaluation of sex-role stereotypes of women in medicine and the need to investigate unfounded notions as to the "nature" of women in other non-traditional fields as well as of women in general.

## References

Bakan, D. The Quality of Human Existence. Chicago: Rand McNally Co., 1966

Becker, H.S., Geer, B., Hugh, E., and Strauss, A. Boys in White. Illinois: University of Chicago Press, 1961.

Erón, L.D. Effect of medical education on medical students' attitudes. Journal of Medical Education, 1955, 30, 559-566.

Scott, W. Values and Organizations: A Study of Fraternities and Sororities. Chicago: Rand McNally Publishing Co., 1965.