

Level of Comfort Reported by Pharmacists and Pharmacy Students When Counseling Male and Female Patients¹

Sally Beck and Burrton Woodruff

Department of Psychology, Butler University, Indianapolis, IN 46208

Beverly J. Sandmann² and Jeanne Hawkins Van Tyle

College of Pharmacy, Butler University, 46th and Sunset Avenue, Indianapolis IN 46208

An investigation was undertaken to determine the degree of comfort associated with patient counseling for pharmacy students and pharmacists. A comfort level survey was prepared and distributed to pharmacy students after externship/clerkship experiences and to a group of pharmacy practitioners during the 1989 Indiana Pharmacy Association annual meeting. The survey utilized a Likert scale format to rate the level of comfort associated with counseling both female and male patients on sixteen side effects characteristic of antihypertensive drugs. Participants also took The Bern Sex-Role Inventory which gives a measure of an individual's identification with traits associated with masculinity and femininity. Participants were classified as traditionally female, traditionally male, androgynous (having the traits of both sexes), or undifferentiated. The degree of comfort is reported with reference to side effect, experience level, sex of patient, sex of pharmacist or pharmacy student and Bern gender classification. Where there were significant differences in patient counseling comfort, those pharmacists and pharmacy students classified as androgynous reported greater comfort than those classified as traditionally male, traditionally female or undifferentiated. A greater degree of comfort was also reported when discussing sensitive sex-related issues with a patient of the same sex as compared to a patient of the opposite sex.

INTRODUCTION

The delivery of services by the pharmacist to the public includes not only expert knowledge regarding pharmacotherapeutics but also sensitivity to and support for the individual seeking information. While pharmacy professional programs may include courses which emphasize the importance of being sensitive to a patient's feelings when facing a personal health care issue, there is a paucity of information regarding what the pharmacist may subjectively feel in the process of such interactions. Pharmacists' attitudes, as they relate to counseling behavior, generally have been neglected as a research focus(1). The attitudes and personal viewpoints of the health professional may influence her/his ability to effectively interact with a concerned patient(2,3). Thus, it would seem that the degree of comfort which the pharmacist or pharmacy student experiences when dealing with sensitive issues would influence the nature and outcome of patient counseling. Since the pharmacist is often the first person consulted for a health problem, an embarrassing or awkward interaction on a sensitive issue with a pharmacist might interfere with adequate exploration of that health problem.

Historically, pharmacy has been populated by males(4-6) and has been perceived as a traditionally masculine field(7). More recently, the shift away from being a male dominated field has been dramatic(8,9), and today, women comprise a majority of degree seeking students in pharmacy. In contrast, a minority of all practicing pharmacists are female.

Effects of Masculinity and Femininity on Social Interaction

It is important to know how an individual views himself or herself since the manner in which men and women believe they ought to act in traditional sex roles has been shown to be an important factor in interpersonal interaction. Several authors have drawn attention to the attitudes and predispositions toward communications which may exist between men and women and the possible influence of a person's gender on practice behavior(3). Currently, researchers refer to these beliefs, attitudes, and behaviors about one's self as the gender role of the individual. The importance of gender role, and the perceptions influenced by gender, have been viewed as important to the communications process itself(4,10).

Bern has indicated that persons differ in the way in which they view their own gender role and the gender role of others(11). According to Bern, femininity and masculinity have been seen in the past as opposites on a bipolar scale. However, she maintains it is possible for an individual to have the traits and perceptions of both traditional femininity and traditional masculinity. When there is only a weak reporting of masculine and feminine traits, an individual is classified by Bern as undifferentiated. When an individual strongly reports both masculine and feminine traits, Bern describes her/him as psychologically androgynous. Such a person might show, for example, at times compassion (traditionally feminine trait), and at other times assertion (tra-

¹ Presented in part at the poster session at the 91st ACP Annual Meeting, Salt Lake City UT, July 10, 1990.

² Corresponding author.

Table I. BSRI femininity and masculinity scores for the subjects

	Student		Pharmacists		BSRI Norms	
	Female	Male	Female	Male	Female	Male
Femininity						
Sample Size	84	44	9	44	340	476
Mean	5.65	5.41	5.66	5.55 ^a	5.57	5.19
Median	5.7	5.6	5.7	5.7	5.7	5.3
SD	0.701	0.852	0.981	0.750	0.76	0.78
Masculinity						
Sample Size	84	44	9	44	340	476
Mean	4.77	4.92	4.64	5.168 ^a	4.78	4.88
Median	4.8	5.0	4.9	5.3	4.8	4.9
SD	0.803	0.761	1.118	0.816	0.81	0.79

^a Means differ from BSRI norms; $P < 0.05$ from one-sample *t*-test.

ditionally masculine trait) depending on the appropriateness of the situation. According to Bern, persons who exhibit both female and male traits and are classified as androgynous, are thought to be more comfortable with a wide range of behaviors and perceptions and might be less restricted by culturally expected male and female roles. This is in contrast to the traditionally sex-typed person who is "motivated to keep her or his behavior consistent with an expected and idealized image of femininity or masculinity, a goal that she or he presumably accomplishes, both by selecting behaviors and attributes that enhance the image and avoiding behaviors and attributes that violate the image" (11). For example, a traditional female may experience discomfort when discussing sensitive issues with a male patient or be reluctant to address them at all since, culturally, a female might not be expected to engage in an intimate discussion with a male she does not know. Similarly, a traditional male may experience discomfort in discussing sensitive issues with a female patient since the culture might expect him not to discuss intimate issues with a woman he does not know. While there are reports on how the public perceives the gender and gender role of professionals in various occupations (2,12-14), little attention has been paid to how the gender and gender role of the professional (in this case the pharmacist) may determine her/his own self-perception in counseling the public.

The goal of this study was to explore the impact of pharmacists' and pharmacy students' gender and gender role perceptions on the comfort level which they reported when counseling male and female patients on sensitive and nonsensitive issues. It was hypothesized that: (i) androgynous pharmacists and pharmacy students would report a greater degree of comfort with patient counseling on a wide range of issues, including those which might be personally sensitive and (ii) same sex counseling between pharmacists/pharmacy students and their patients will be more comfortable than opposite sex counseling.

METHODOLOGY

The subjects of this study were 46 male and 10 female Indiana pharmacists³, all with 10 or more years of practice experience, who voluntarily participated in the study during the 1989 annual Indiana Pharmacy Association meeting. In addition, 44 male and 84 female pharmacy students enrolled as fifth-year students (classes of 1990 and 1991) in the

professional pharmacy program at Butler University served as volunteer participants. The students had completed their externship/clerkship requirements.

The pharmacists and pharmacy students were asked to complete a demographic questionnaire, the Bern Sex Role Inventory, and a survey questionnaire to measure counseling comfort. Before the subjects began the questionnaire, they were instructed to sign and date a consent form which acknowledged that all data would be kept confidential and that all results would be processed as grouped data only.

Comfort Survey Questionnaire

The author-developed Comfort Survey Questionnaire (CSQ) was a two page form composed of 16 side effects of antihypertensive drugs. The terminology used for the side effects was the same as that listed in the package insert or USP-DI for the medications. Four were male-specific side effects (MSE-impotence, gynecomastia, priapism and prostatic enlargement), four were female-specific side effects (FSE-lactation, menorrhagia, vaginal candidiasis and breast tenderness) and eight were sex-nonspecific side effects experienced by both males and females (SNSE-nocturia, flatulence, orthostatic effects, dry mouth, hyperhidrosis, muscle cramps, dizziness and incontinence). To control for possible order effects in the listing of the items on the questionnaire, the 16 items were counterbalanced and arranged in three different orders. On one form a female-specific side effect was listed first, on one a male-specific side effect was listed first, and a third began with a sex-nonspecific side effect.

In order to explore the comfort level with reference to the sex of the patient being counseled two forms of each of the three arrangements were employed. Each arrangement of the 16 item CSQ was then written with reference to a male patient or male family member or with reference to a female patient or female family member. To control for possible order effects of the patient's sex, half of the participants received a CSQ with reference to a female patient or female family member first and half received a form referring to a male patient or male family member first. In completing the CSQ, subjects were asked to imagine that they were actually discussing the 16 side effects with a patient of the sex listed on the form in front of them. Comfort level on the CSQ was assessed by ratings of the antihypertensive drug side effects on a 5-point Likert Scale (1 = very comfortable to 5 = very uncomfortable). Subjects were asked to draw a line through any antihypertensive drug side effect which was unfamiliar to them.

BSRI Gender Assessment

Gender classification for all subjects was obtained by scores on the short form of the Bern Sex Role Inventory (BSRI)⁴. Classification of the pharmacists and pharmacy students is given in Table I where BSRI Norms represent the normative sample reported by Bern⁴. The participants were classified into the four BSRI gender categories based on the median pharmacy student scores (see Table I, 5.0 for masculinity; 5.7 for femininity). Those subjects who scored above the median score for femininity and below the median score for masculinity were classified as traditionally female

³The data from three of the pharmacists were incomplete and not included in the study.

⁴Complete scoring on this inventory is described by Bern in the Bern Sex Role Inventory Professional Manual, Consulting Psychologists Press, Inc., 577 College Avenue, Palo Alto CA 94306.

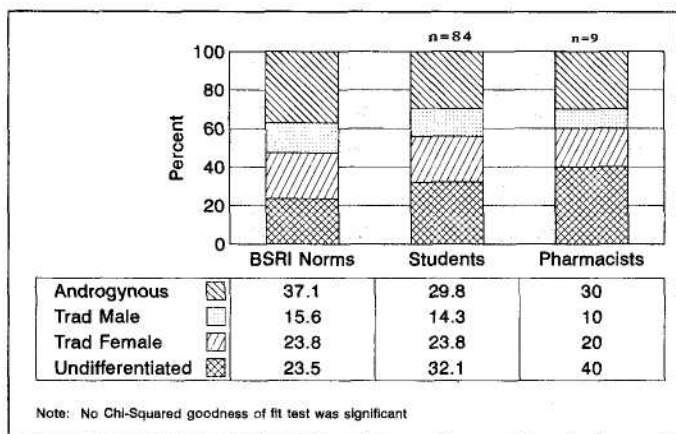


Fig. 1. Classification of female participants into BSRI gender categories

and vice versa for traditionally male. The subjects who scored above the median scores for femininity and masculinity were classified as androgynous; those scoring below the median for both scores were classified as undifferentiated. For the pharmacy student sample, 20 were classified as traditionally female, 14 as traditionally male, 28 as androgynous and 34 as undifferentiated. For the practicing pharmacist sample, 8 were classified as traditionally female, 11 traditionally male, 19 as androgynous and 11 as undifferentiated.

According to Bern, gender classification of subjects may be made using either the normative medians or medians based on a research sample if it is large. In this study, the student sample was indeed large and had median scores close to the Bern normative sample. For these reasons, the student medians were judged appropriate for classification purposes. Classification of the pharmacists and pharmacy students is shown in Figures 1 and 2.

Variable Assignment

For purposes of interpretation, this study consisted of 5 independent variables:

1. BSRI gender classification (GENDER: androgynous (A), traditionally male (TM), traditionally female (TF), or undifferentiated (U)),
2. professional status (STATUS: pharmacist or pharmacy student),
3. sex of the pharmacist or pharmacy student (SEX: female or male),
4. sex of the patient (PATSEX: male or female),
5. drug side effect (SE: 16 individual side effects further differentiated into MSE: male-specific, FSE: female-specific, or SNSE: sex non-specific).

The dependent variable was comfort ratings given by the pharmacists and pharmacy students. Means of the CSQ ratings were analyzed by a series of ANOVAS on a VAX 6420 using SPSS^x (v. 4.0).

RESULTS

The Tukey Method of Multiple Comparisons (TMMC) was used to explain the ANOVA results. A series of *t*-tests showed there were no significant differences for the CSQ ratings for the class of 1991 and the class of 1990 permitting these data to be combined. Data were entered into computer files and extensively checked for transcription errors

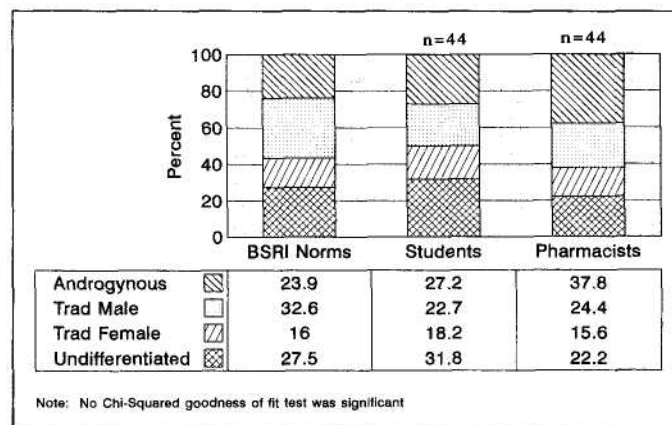


Fig 2. Classification of male participants into BSRI gender categories

Table II. Significance tests for the effect of participants status, sex and BSRI gender

Source of variation	SS	DF	MS	F	Sig of F
Within cells (error term)	283.34	129	2.20		
Status	1.48	1	1.48	0.68	NS(0.413)
SEX	0.00	1	0.00	0.00	NS(0.973)
Gender	43.43	3	14.48	6.59	0.000
Status by SEX	8.43	1	8.43	3.84	0.052
Status by GENDER	2.60	3	0.87	0.39	NS(0.757)
GENDER by SEX	11.06	3	3.69	1.68	NS(0.175)
Status by GENDER by SEX	11.51	3	3.84	1.75	NS(0.161)

Generally, the CSQ ratings were on the comfortable side of the Likert scale.

Repeated Measures ANOVA

The first step in the analysis of the comfort ratings was to explore the possible differences between pharmacists and pharmacy students. An SPSS⁷ MANOVA procedure was used to conduct a repeated measures ANOVA on the comfort ratings given by those two groups which were averaged for each of the three types of drug side effects (MSE, FSE and SNSE).

Table II summarizes the results of these tests of significance for the between subjects effects for a five-way repeated measures ANOVA. The main effect of professional status (STATUS) was not a significant variable in determining the counseling comfort level of either the pharmacists ($x = 1.99$)⁵ or pharmacy students ($x = 1.90$). The main effect of sex (SEX) of the pharmacist and pharmacy student also was not a significant variable in determining counseling comfort [female pharmacists and pharmacy students ($x = 1.91$) and male pharmacists and pharmacy students ($x = 1.95$).

The BSRI gender main effect (GENDER) was a significant variable in determining counseling comfort ($x_U = 2.178$; $x_{TM} = 2.065$; $x_{TF} = 1.887$; $x_A = 1.653$). A TMMC was em-

⁵ Comfort level on the CSQ was assessed by a five-point Likert Scale (1 = very comfortable to 5 = very uncomfortable).

⁶ $q = 5.88$, $r = 4$, $MS_{error} = 2.2$, $MS_{error} DF = 129$.

⁷ $q = 3.89$, $r = 4$, $MS_{error} = 2.2$, $MS_{error} DF = 129$.

Table III. Significance tests for repeated measures ANOVA for the effect of patient sex

Source of variation	SS	DF	MS	F	Sig of F
Within cells					
(error term)	21.51	129	0.17		
PATSEX	3.11	1	3.11	18.63	0.000 ^a
Status by PATSEX	8.49	1	8.49	50.94	0.000
GENDER by PATSEX	0.19	3	0.06	0.3	NS(0.771)
SEX by PATSEX	8.08	1	8.08	48.49	0.000
Status by GENDER					
by PATSEX	0.07	3	0.02	0.14	NS(0.935)
Status by SEX by					
PATSEX	0.28	1	0.28	1.68	NS(0.197)
GENDER by SEX					
by PATSEX	2.14	3	0.71	4.27	0.007
Status by GENDER					
by SEX by PATSEX	2.12	3	0.71	4.24	0.007

^a Greater comfort was reported when counseling a female patient ($x = 1.87$) than when counseling a male patient ($x = 1.99$).

ployed to clarify the dependence of CSQ score means on GENDER. As predicted, androgynous pharmacists and pharmacy students were more comfortable than undifferentiated⁶ ($P < 0.05$) or traditionally male⁷ ($P < 0.05$) when counseling either male or female patients about sensitive issues.

There is also evidence that there is a significant interaction between professional status and the sex of the pharmacists and pharmacy students in determining the degree of comfort experienced in patient counseling. Female pharmacy students ($x = 1.86$) reported equal comfort to that of male students ($x = 1.99$), but female pharmacists ($x = 2.30$) reported significantly less comfort than male pharmacists ($x = 1.92$). It must be noted however, that the female pharmacist sample size is very small ($n = 9$) which limits interpretation of their ratings.

Table III summarizes the repeated measures ANOVA results for within subjects effects for patient sex. This analysis indicates that counseling comfort was found to be reliably influenced by the sex of the patient. The interaction between the sex of the patient and the sex of the pharmacist and pharmacy student is presented in Figure 3. Scheffe's Test⁸ for opposite- vs same-sex patient counseling was highly significant [female counseling male, ($x = 2.103$); male counseling female, ($x = 2.024$); male counseling male, ($x = 1.879$); female counseling female, ($x = 1.722$); ($P < 0.001$).] Both male and female pharmacists and pharmacy students are more comfortable when counseling same sex patients than opposite sex patients. The sex of the patient has a bigger impact in determining counseling comfort for female pharmacists and pharmacy students than for male pharmacists and pharmacy students. A Tukey procedure on the values plotted in Figure 3 indicated that all points are reliably different except the two for opposite-sex dyads (female pharmacists and pharmacy students counseling male patients and male pharmacists and pharmacy students counseling female patients),⁹ ($P < 0.05$).

The degree of comfort, when counseling a patient of one's own sex or of the opposite sex, depends upon the pharmacist's or pharmacy student's GENDER. Figure 4 illustrates the interaction effect of GENDER X SEX X

Table IV. Significance tests for repeated measure ANOVA by type of antihypertensive drug side-effect

Source of variation	SS	DF	MS	F	Sig of F
Within cells					
(error term)	51.69	258	0.20		
SE	59.29	2	29.65	147.98	0.000
Status by SE	1.99	2	1.00	4.97	0.008 ^a
GENDER by SE	1.68	6	0.28	1.40	NS(0.216)
SEX by SE	9.84	2	4.92	24.56	0.000
Status by GENDER					
by SE	1.80	6	0.30	1.50	NS(0.178)
Status by SEX by SE	1.31	2	0.65	3.26	0.040
GENDER by SEX					
by SE	0.75	6	0.13	0.63	NS(0.709)
Status by GENDER					
by SEX by SE	1.26	6	0.21	0.05	NS(0.392)

^a Pharmacy students indicated less comfort than pharmacists when counseling on MSE ($x_{\text{students}} = 2.26$, $x_{\text{pharmacist}} = 2.21$) and more comfort than pharmacists when counseling on SNSE ($x_{\text{students}} = 1.56$, $x_{\text{pharmacists}} = 1.69$) and on FSE ($x_{\text{students}} = 1.88$, $x_{\text{pharmacists}} = 2.06$).

PATSEX. Both male and female pharmacists and pharmacy students who were classified androgynous report approximately the same degree of comfort when counseling either same sex or opposite sex patients. However, a wider range of comfort levels was reported by traditionally male pharmacists and pharmacy students. The reported comfort of female pharmacists and pharmacy students counseling female patients is generally high and appears to be less effected by GENDER than the other three SEX by PATSEX combinations.

Those pharmacy and pharmacy students classified as traditional show two effects: Traditional males are less comfortable than traditional females when counseling either sex. In addition, pharmacists and pharmacy students classified as traditionally male and traditionally female are more comfortable when counseling same-sex patients.

The significant four-way interaction (STATUS X GENDER X SEX X PATSEX) extends the pattern that was graphically presented in Figure 4. For each BSRI gender classification there are 8 datapoints (means)—2 sexes X 2 patient sexes X 2 levels of experience (pharmacist vs pharmacy student). The 8 mean values for androgynous pharmacists and pharmacy students are tightly clustered [a range of only about one-third of a rating separates the largest from the smallest mean, (1.81 to 1.48)]. The means of the traditionally male and traditionally female pharmacists and pharmacy students are less tightly clustered.

An important aspect of this data appears for the pharmacists and pharmacy students classified as undifferentiated. Both male and female pharmacists, classified as undifferentiated, reported less comfort when counseling patients of the opposite sex.

Table IV summarizes the repeated measures ANOVA results for within subjects effects involving the type of antihypertensive drug side effect (MSE, FSE, SNSE). The

⁸ Scheffe's Test provides the same type of information as Tukey, but allows the formation of combined comparisons. In this case, we combined female counseling males with males counseling females to form the "OPPOSITE SEX" category [$t(3) = 9.423$; standard error of the contrast = 0.0552]. The other half of the comparison is the "SAME SEX" category.

⁹ Smallest $q = 5.61$; $r = 3$; $MS_{\text{error}} = 0.17$; $MS_{\text{error}} \text{ DF} = 129$.

¹⁰ Smallest $q = 8.132$; $r = 3$; $MS_{\text{error}} = 0.2$; $MS_{\text{error}} \text{ DF} = 258$.

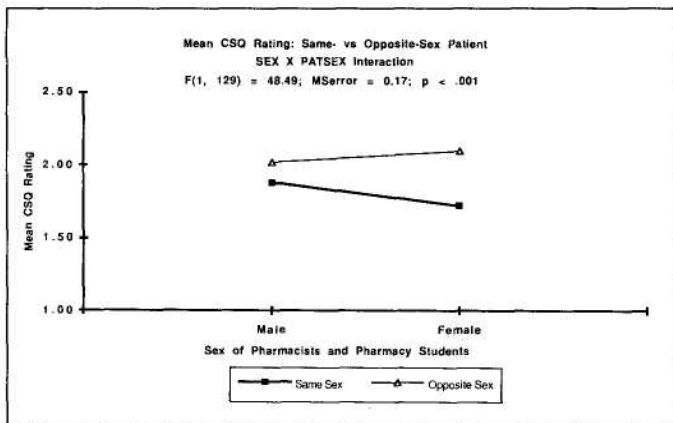


Fig 3. Degree of counseling comfort experienced by pharmacists and pharmacy students when counseling same sex or opposite sex patients.

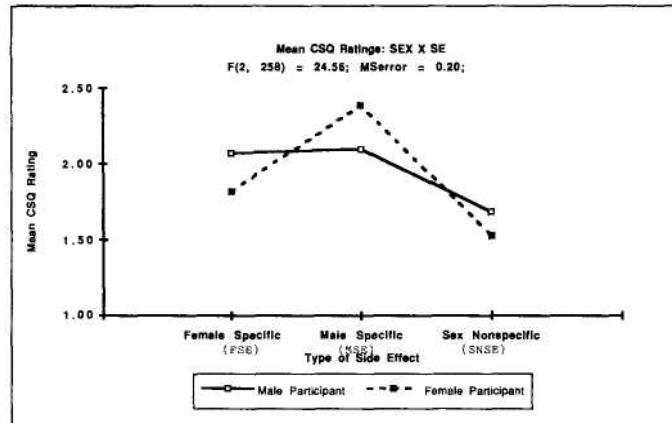


Fig 5. Degree of counseling comfort experienced by all male and female participants when discussing female specific, male specific, or nonspecific antihypertensive drug side-effects.

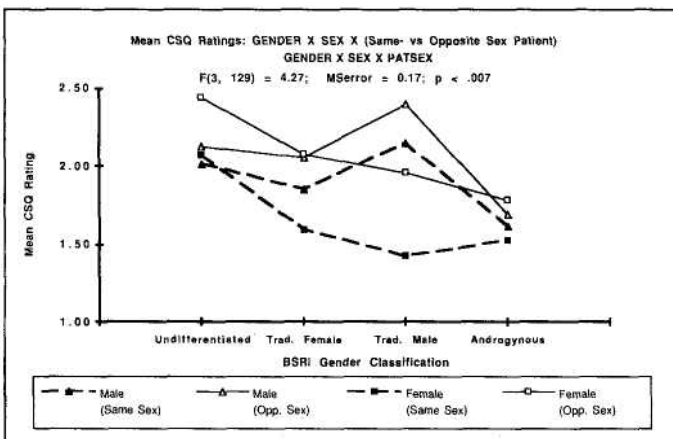


Fig 4. Degree of counseling comfort experienced by all male and female participants classified by BSRI gender score (GENDER) when counseling same or opposite sex patients.

type of side effect being discussed influenced the degree of counseling comfort reported by both pharmacists and pharmacy students. Both of these groups reported greater comfort when counseling patients about SNSE and least comfortable counseling about MSE. The mean comfort level for the MSE was ($x = 2.246$); for the FSE was ($x = 1.944$); and for the SNSE, ($x = 1.607$). The Tukey analysis indicated that all three means differ reliably¹⁰ ($P < 0.05$). The type of side effect had a larger impact on pharmacy students than on pharmacists as indicated by a significant STATUS X SE interaction explained with Table IV.

The sex of the pharmacists and pharmacy students was a significant determiner in the degree of comfort reported depending on the type of side effect being discussed. As seen in Figure 5, female pharmacists and pharmacy students are less comfortable discussing MSE (opposite sex side effects) than FSE (same sex side effects); the male pharmacists and pharmacy students are less comfortable with both MSE (same sex side effects) and FSE (opposite sex side effects) than when discussing the SNSE. As indicated previously, both male and female pharmacists and pharmacy students are more comfortable discussing SNSE. GENDER did not interact significantly with type of side effect, indicating that the importance of GENDER in affecting counseling comfort is not dependent on the type of drug side effect being counseled.

DISCUSSION AND SUMMARY

This study supports the hypothesis that androgynous pharmacists and pharmacy students would report a greater degree of counseling comfort. This finding is quite compatible with Bem's(11) contention that persons classified as androgynous possess both male and female traits; and one might speculate that such individuals might be more empathetic and comfortable with issues related to both sexes. This is further supported by Bern *et al.*(15), who reported that only men classified as androgynous showed the ability to both stand firm in their opinions when needed (considered a masculine trait) and at the same time offer a sympathetic ear to someone in distress (considered a feminine trait). The same general pattern was found for women. Feminine women were found to be low in independence (considered a masculine trait), and women classified as masculine women were found to be low in nurturance (considered a feminine trait). Only androgynous women were able to exhibit both independent and sympathetic behaviors. Thus, these findings suggest that the psychologically androgynous individual (thought to be both independent and compassionate) may be freer to initiate an interaction with a patient who may be facing personal problems related to drug side effects and also be more likely to give the necessary emotional support to that patient under stress.

The results of this study indicated that those pharmacists and pharmacy students who were classified as traditionally male reported less counseling comfort with their patients (both male and female). One might speculate that they feel more restricted by culture's expectations for them in interpersonal relations, in general, and less comfortable when they perceive that they are "stepping out" of their prescribed role, especially when discussing intimate and sex related topics. Those pharmacy students in this study, who were classified as traditionally female, have reported being comfortable with patient counseling. It may well be that such females have learned to be comfortable with the caretaker role perhaps expected of them by our culture. One might speculate that women, regardless of their BSRI gender classification, may have been expected to discuss sexual and medical/health related issues, particularly with other women, and that these discussions are not outside of their cultures' expectation. While the results of this study revealed that GENDER is an influencing variable in deter-

mining counseling comfort of pharmacists and pharmacy students, further investigation to specifically spell out the nature of that relationship should be explored.

In addition to the overall conclusion in this study, that same sex counseling is reported to be more comfortable than opposite sex counseling, specific statements which are related to the type of side effect being discussed must also be made. Both male and female pharmacists and pharmacy students are more comfortable when dealing with sex-non-specific side effects of antihypertensive drugs and least comfortable discussing male specific side effects. It may be that in our culture, interpersonal discussion of male problems may have been perceived as inappropriate. Research has revealed that men are less willing than women to acknowledge anxiety, fear and other negatively toned emotions (16). Snell and co-workers have indicated a need to focus research on the conditions which foster inhibited disclosure among men. Considering the opinion that attitudes regarding trust in interpersonal relationships between men and women have appeared to remain the same since 1976 (17), it may be that there has been far less experience in discussing male problems and male specific side effects by both pharmacists and pharmacy students with their male patients. This suggests that additional information about the degree to which patients (especially males) are willing to report intimate and sex-related side effects of their medications should be extensively explored. It is further suggested that communication courses, which focus on person-to-person verbal discourse, include components which deal with sensitive sex-related issues involving drug actions or drug side effects. These results support the general observation by Berger(18) regarding the need and positive value of helping pharmacists to better counsel hypertensive patients.

Am. J. Pharm. Educ., **58**, 38-43(1993); received 12/4/92, accepted 12/10/93.

References

- (1) Mason, H.L. and Svarstad, B.L., "Medication counseling behaviors and attitudes of rural community pharmacists," *Drug Intell*

- Clin.Pharm.*, **18**, 409-414(1984).
- (2) West, C., "When the doctor is a lady: Power, status and gender in physician-patient encounters," *Sym. Inter.*, **7**, 87-106(1984).
- (3) Laurier, C, Archambault, A. and Contandriopoulos, A., "Communication of verbal information by community pharmacists," *DICP, Ann. Pharmacother.*, **23**, 862-868(1989).
- (4) Kirk, K.W., "Women in male-dominated professions," *Am. J. Hosp. Pharm.*, **39**, 2089-2093(1982).
- (5) Shepherd, M.D. and Kirk, K.W., "Analysis of pharmacy practice patterns of men and women pharmacy school graduates," *Contemp. Pharm. Pract.*, **5**, 189-197(1982).
- (6) King, CM., Oliver, E.J. and Jeffrey, L.P., "Career goals and expectations of men and women pharmacy residents," *Am. J. Hosp. Pharm.*, **39**, 1944-1948(1982).
- (7) U.S. Bureau of the Census. *Statistical Abstract of the United States: 1992*, (112th edition), Washington DC, (1992) p. 392.
- (8) Fink, R.J., Draugalis, J.L. and McGhan, W.F., "Commitment to the profession of pharmacy: Are there sex differences?" *Am. Pharm.*, **NS29**, 28-34(1989).
- (9) Avery, C.S., "Feminization of pharmacy," *Am. Drug.* **204**(3), 21-29(1991).
- (10) Higgins, G., "Interviewee disclosure in an analogue initial 'helping' interview: Some effects of participant gender and interview content," PhD thesis, State University of New York at Stony Brook, (1981) p. 258.
- (11) Bern, S. L., *Bern Sex Role Inventory Professional Manual*, Consulting Psychologist Press, Inc., Palo Alto CA (1981) p. 4.
- (12) Murphy-Cullen, C.L. and Larsen, L.C., "Interaction between the socio-demographic variables of physicians and their patients: Its impact upon patient satisfaction," *Soc. Sci. Med.*, **19**, 163-166(1984).
- (13) Gravitz, M. A. and Gerton, M.I., "Public prestige and preferred gender of mental health providers," *J. Clin. Psychol.*, **33**, 919-921(1977).
- (14) Kelly, J.M., "Sex preference in patient selection of a family physician," *J. Fam. Pract.*, **11**, 427-433(1980).
- (15) Bern, S.L., Martyna, W. and Watson, C., "Sex typing and androgyny: Further exploration of the expressive domain," *J. Pers. Soc. Psychol.*, **34**, 1016-1023(1976)
- (16) Snell, N.E. Jr., Miller, R.S. and Belk, S.S., "Development of the emotional self-disclosure scale," *Sex Roles*, **18**, 59-73(1988)
- (17) Carrocci, N., "Trust and gender ten years later," *Women's Studies in Commun.*, **11**, 63-89(1988).
- (18) Berger, B.A., Stanton, A.L., Felkey, B.G., Barker, K.N. and Green, S.B., "Effectiveness of an educational program to teach pharmacists to counsel hypertensive patients and influence treatment adherence," *J. Pharm. Mark. Manage.*, **5**(2), 27-41(1990).