ANDROGYNY AND INTERPERSONAL COMPETENCE

By

Lisa Sherron Blank

A THESIS

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

MASTER OF ARTS

Department of Psychology

1984

ABSTRACT

ANDROGYNY AND INTERPERSONAL COMPETENCE

By

Lisa Sherron Blank

The relationship of sex-type to interpersonal competence, defined as behavioral measures of self-acceptance and acceptance of others, was explored in the context of small, interpersonal groups, thought likely to reflect communal and agentic skills and values. Bem's Sex Role Inventory was administered at two points during each of four terms of the course featuring these groups after about 22 and 50 hours of group participation. Near these times self- and peer-ratings of each participant's interpersonal behavior were also collected. Strong associations of masculinity with self-acceptance, and femininity with acceptance of others, were revealed in both self- and peer-ratings. Androgynous persons were depicted by self and peers as more accepting of both self and others than were their masculine, feminine and undifferentiated peers. The four sex-types showed the predicted and some surprising patterns of interpersonal competence. Implications for future research were discussed.

ACKNOWLEDGEMENTS

First acknowledgements go to the students and facilitators of the Psychology 400 groups who were willing and interested participants in this research. I am also grateful to the friends and fellow graduate students who offered very practical help and warm support through all stages of the process: to Jeff Roach, whose enthusiasm and patience helped shape the proposal; to Miriam for her introduction to the computer; to Sallie and Julie for their companionable presence and ready help during long summer days at the computer center; and to Jim, Sallie, Wes and my sister Leslie who shared my anxieties, discouragement and -- finally, the joy of a rite of passage completed, when enough is really, finally, enough.

For my committee members, in all their varied roles, a special thanks:

to Don Grummon, teacher, supervisor and fellow staff member;

to Elaine Donelson, whose interest in personality, values, psychology of women and spirituality has fostered and actively supported my own;

and especially to John Hurley, who, as chairperson, advisor, teacher, supervisor and real friend, gave me both support and autonomy through my experience of his confidence in me.

A final thanks to Suzy Pavick for careful work and caring.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

INTRODUCTION

In the past ten years, the development of the concept of psychological androgyny and instruments to identify and measure it has contributed to an increased interest in sex-role research. This response has been considered an indication of how well the concept captured and expressed the Zeitgeist in sex-role research, and has resulted in a considerable, and sometimes bewildering, array of findings.[1] As this research comes of age, there has been increased concern about the integration of androgyny and androgyny research within the broader field of social/personality theory and research (Lenney, 1979). Within this larger context, one way of exploring research on the relationship of androgyny to adjustment might be through increased attention to criterion and contextual variables: adjustment by what criteria and in what context? These concerns need to be kept in mind when examining the relevant androgyny literature.

Early research on sex-role identity and maculinity and femininity essentially assumed a bipolar model of masculinity and femininity where those qualities were considered opposite ends of a single continuum: individuals were either masculine or feminine but not both (Constantinople, 1973). Tests such as the Terman Miles M-F Test (1936), the M-F Scale of the Strong Vocational Interest

Blank (1943), the Mf scale of the Minnesota Multiphasic Personality Inventory (Hathaway & McKinley, 1943), and the Femininity Scale of Gough's California Personality Inventory (1964), which had been developed to assess masculinity and femininity reflected this bipolar concept of scale construction, and permitted classification of individuals only as masculine males, feminine females, or sex-reversed deviants. Since the primary criterion for item selection on these older tests was differential responses by males and females, items tapped sex-typed behaviors as well as personality traits. This basic model of masculinity and femininity had been supported by the theoretical assumption that mental health and successful adjustment depended upon the internalization of the appropriate sex-role identity along with gender-appropriate behavior.

More recent research has criticized the previous lack of conceptual and empirical distinction among important variables of biological sex, gender identity, sex-role behaviors, and psychological characteristics of masculinity and femininity by researchers and psychometricians, and challenged the bipolar model itself, along with its underlying assumptions. Bem (1974) introduced the concept of androgyny with her development of a new sex-role inventory that treated masculinity and femininity as logically and empirically independent dimensions, making it possible to characterize individuals as masculine, feminine, or androgynous (originally as a function of the difference between the endorsement of masculine and feminine personality characteristics). The Bem Sex Role Inventory (BSRI) had a masculinity scale, a femininity scale, and

a social desirability scale. These scales were constructed to reflect consensually validated socially desirable traits for men and women--the extent to which these traits are endorsed for men and women, rather than by them in everyday behavior. Other scales based on the new model and designed to measure androgyny were the Personality Attributes Questionnaire (PAQ) (Spence, Helmreich, & Stapp, 1974), the PRF scale (Berzins, Welling, & Wetter, 1978) and the Androgyny measure from the Adjective Check List (Heilbrun, 1976).

Bem's interest in androgyny arose from a concern with, and awareness of, the debilitating effects associated with strict conformity to sex-stereotypic behaviors (Bem, 1975). Thus, her view of androgyny as the combined presence of socially valued, stereotypic masculine and feminine characteristics also challenged earlier views of adjustment by predicating that people with androgynous self-concepts might more freely engage in a wider range of both "masculine" and "feminine" behaviors according to their situational appropriateness, i.e., be more flexible and adaptively effective in dealing with their world than their sex-typed peers. In contrast to the traditional assumption that strongly sex-typed individuals exemplified mental health, Bem proposed that androgynous individuals may come to define "a more human standard of psychological health."[2] A series of studies carried out in laboratory settings (Bem, 1975; Bem & Lenney, 1975; Bem, Martyna, & Watson, 1976; Bem, 1977) supported these notions of greater situationally-appropriate flexibility and broader behavioral repertoires for androgynous versus sex-types subjects in response to specific tasks.

Investigating the hypothesis that androgynous flexibility makes for better adjustment, Jones, Chernovetz, and Hansson (1978) looked at the relative adjustment levels of 1404 subjects as a function of their psychological sex. Their findings across measures of five areas of psychological functioning showed that flexibility and adjustment were generally associated with masculinity, rather than androgyny, for both males and females. Specifically, masculine males were more confident and competent than androgynous males, androgynous females were better adjusted than feminine females (seemingly supporting Bem's theory, but possibly due to the addition of the masculine element which is highly valued, not the dual posssession of both masculine and feminine characteristics), but masculine females were even more competent and secure than androgynous females.

It seems useful to consider these results in terms of the effects of social context and the employed research method. The authors cited Bakan's (1966) continuum of agency-communality and speculated that in a culture valuing agentic over communal attributes and skills, individuals high in agentic qualities will be more successful within the context of that society's values, and also more confident, due to a history of differential applications of social rewards (i.e., masculine males will be better adjusted than androgynous males). This interpretation is consistent with research showing a differential pattern of results of the effects of androgyny for males and females (Kristal, Sanders, Spence, & Helmreich, 1975; Allegeier, 1975; Kamens & Liss-Levinson, 1975; Brooks & Birk, 1975; Silvern & Ryan, 1979). Given the value base of contemporary society, androgyny may be more strongly associated with adjustment for females than for males.

Kaplan and Sedney (1980) noted that many of the traits and skills measured in the Jones et al. (1978) study represented agentic qualities, with an absence of traits consistent with a communal model, and suggested that if a more representative range of behaviors had been included, the potential strengths of androgynous men might have been more evident. Thus, in conditions/settings where interpersonal or communal skills as well as agentic skills are rewarded, androgyny might be expected to be more closely associated with adjustment for both males and females. This present study was designed with these concerns about criteria and context in mind.

Jones et al. (1978) explained their conclusions about the relationship of androgyny to adjustment in terms of the influence of dominant cultural values. There is additional evidence of the role that these values play in socialization and sex-typing. Bakan (1966) noted the relationship of agency to capitalism, which requires exaggeration of the agentic orientation (self-assertion, self-expansion, etc.). Block (1973) studied sex-role stereotypes across cultures (Norway, Sweden, Denmark, Finland, England, and the United States) and found that stereotypes surrounding masculine and feminine ideals were similar in general and consistent in their differential emphasis on agency and communion for men and women. Some interesting differences were noted: fewer sex differences and less emphasis on agency characterized the two countries with long- and well-established commitments to social welfare (Sweden and Denmark), and both American men and women described their ideal self in more agentic terms than did males and females in the other countries studied. Thus, it may be quite accurate to characterize our culture as one which tends to

value agentic over communal qualities, and this has implications for sex-role research conducted in the context of those values.

The question of the type of traits and skills used to measure "adjustment" is also relevant. In her research on androgyny, White (1979) realized that what she called "communal competencies" were undervalued and underrepresented both in the thoughts of many psychologists and in various personality tests: she viewed Shostrom's (1963) Personality Orientation Inventory and Gough's (1957) California Personality Inventory as being highly agentic-oriented and as lacking communal items.

These issues prompted the search for a context in which to study androgyny that might minimize the effects of the dominant cultural bias towards agency and for measures that might tap a more representative range of behaviors. Such a "mini-culture" was readily at hand. Participants in this research were students enrolled in an undergraduate psychology course designed to foster awareness of, and sensitivity to, one's own interpersonal behavior in the context of small groups for experiential learning. Skills ranging from active initiation of interaction and confrontation to supportive listening and articulation of feelings were taught and practiced within these small groups for the development and enhancement of interpersonal competence. Group facilitators were themselves trained in interpersonal skills to encourage and aid in the creation of a supportive, caring atmosphere in which self-disclosure and the sharing of perceptions of self and others might occur most constructively. In this environment, clearly both communal and agentic qualities are highly valued.

In these groups one standard method of feedback for increased awareness of one's interpersonal style involved the use of a set of ratings of interpersonal behavior on semantic differential measures. At two different points in the life of the group, each group member rated her/himself and every other group member on scales representing two dimensions and the ratings were shared with group members. One dimension identified the intrapersonal behaviors active, expressive, self-effacing and self-concealing, involved in acceptance/rejection of self (ARS). The other dimension identified the interpersonal emotive behaviors warm, helpful, caring and accepting versus cold, harmful, indifferent, and rejecting, involved in acceptance/rejection of others (ARO).

Hurley (1976, 1980) has reviewed much evidence suggesting that human social interaction may be characterized as generally involving two principal dimensions which he has labeled Acceptance versus Rejection of Self (ARS) and Acceptance versus Rejection of Others (ARO). This evidence comes from such diverse sources as parent-child relationships (Schaefer, 1961), studies of behaviors in a wide range of small groups (Foa, 1961; Lieberman, Yalom, & Miles, 1973), and studies involving personality assessment (Freedman, Leary, Ossorio, & Coffey, 1950), psychopathology (Lorr, Bishop, & McNair, 1965; Benjamin, 1977, 1979, 1981). In a comprehensive review of related works, Wiggins (1982) noted that personality theorists have tended to label these two dimensions <u>dominance</u> and <u>affiliation</u>. Hurley believes that the ARS and ARO labels better reflect the underlying psychological processes involved in interpersonal interaction.

Construct validity for the ARS and ARO measures used in the groups has been strongly supported by correlations among their subscales (Hurley, 1976), and through comparisons with other prototypical measures of dominance and affiliation dimensions (Gerstenhaber, 1974; Hurley, 1983).

The ARS and ARO dimensions are functionally independent (Hurley, 1976), and can be depicted orthogonally, producing a grid on which individuals can be located according to their relative capacities for self-acceptance and acceptance of others. From this juxtaposition of ARS and ARO dimensions emerges an important theoretical construct, interpersonal competence, which is represented as a diagonal from the low ARS-low ARO quadrant to the high ARS-high ARO quandrant, and is defined in terms of increasing acceptance of self and of others. Thus, sound measures of these two dimensions should be useful in assessing the level of interpersonal competence of individuals in social interaction. These measures also tap both agentic, self-assertive skills (e.g., Dominant--Submissive) and communal qualities (e.g., Accepts Others--Rejects Others) in the measurement of interpersonal competence.

This study was designed to explore relationships between sex-type and self-perceived acceptance of self and acceptance of others, and between sex-type and acceptance of self and others as rated by others. Chosen as the measure of sex role identity, the BSRI was administered at two points during each of four consecutive terms, initially after approximately 22 hours of group participation and near the groups' end (after about 50 hours of participation). Ratings for each person on the ARS and ARO scales by both self and

by other group members were collected at or near these same two times, as measures of interpersonal competence, both as self-perceived and as judged by others.

It was hypothesized that individuals with androgynous sex-role self-concepts would be seen by themselves and others as relatively high in acceptance of self and of others. Individuals with masculine sex-typing were expected to be viewed by both self and others as high on acceptance of self, but low on acceptance of others. The reverse pattern was anticipated for feminine sex-typed individuals, who would be seen as being very accepting of others but less self-accepting. Individuals who indicated little sex-role differentiation (low endorsement of both masculine and feminine characteristics) were expected to be seen as low on both dimensions. Thus, androgynous individuals were expected to demonstrate more interpersonal competence as a measure of positive adjustment/functioning in comparison to their sex-typed peers, where both measure and context/setting were thought likely to reflect communal and agentic values and skills.

METHOD

Participants

Eighty-eight junior and senior college students at Michigan State University (MSU) participated. All were enrolled in an upper-level psychology course (PSY 400) for one of four terms: spring or fall terms of 1981, and winter or spring terms of 1982. The course entailed one 50-minute classroom meeting each week, the completion of an assigned textbook on interpersonal skills within small groups, and a total of about 50 hours of participation in small groups for experiential learning. The 54 females and 34 males were assigned to mixed-sex groups of 4-8 members primarily on the basis of scheduling convenience, although efforts were made to balance the proportion of men and women in each group. The only further stipulation was that close friends could not be in the same group. All groups met for two 90-minute sessions weekly and for two continuous 12-hour sessions (marathons) around the third and seventh weekends of the term. Each group had one or two facilitators who were either (a) undergraduates who had taken the course previously and undergone special training to facilitate or (b) graduate students in clinical psychology. Members and facilitators kept logs/journals that detailed their interactions and related thoughts and feelings about each other group member separately for each session and also completed rating packets near each term's midpoint and end.

Procedure

In their introduction to the course, these students were routinely informed by the instructor that they might be asked to fill out various forms as part of continuing studies of these groups, and advised that their grade was not contingent upon their participation in the studies. I came to the weekly class meetings after the first marathon each of the four terms and requested the students to fill out a short questionnaire for research purposes connected with a study of personality and to allow their post-marathon group ratings to be used in the same study. Rsearch consent forms were handed out and the Bem Sex Role Inventory was administered. I returned to the classes on the last meeting of each term and repeated the procedure, explaining the purpose and hypotheses of the study after collecting the second BSRI. Mid- and final-group ratings were obtained from the instructor. Two students declined to participate and several students were not present at both class meetings.

Measures

Bem Sex Role Inventory (BSRI). Bem's (1974) BSRI consisted of sixty adjectives arranged in a seven-step Likert format which yield three scales of twenty items each: Masculinity (M), Femininity (F), and Social Desirability (SD). Respondents indicated how accurately each characteristic applied to him/herself, and received M, F, and SD scores derived from the means of the responses on each scale. The M and F scores were used in a median-split procedure to classify androgynous, masculine, feminine, or undifferentiated. Persons who scored above both the median Masculinity and median Femininity score

of this sample were classified as "androgynous" in their sex-role identity. Persons scoring above the median Masculinity score and below the median Femininity score were classified as "masculine;" persons with the reverse pattern were classified as "feminine." Respondents with scores below both medians were designated as "undifferentiated" in their sex-role identity.

The BSRI evolved from a rating procedure where 100 student judges were asked to rate 400 personality characteristics as to their appropriateness for men or women. An item was judged masculine (M) or feminine (F) if both male and female judges independently considered that characteristic to be significantly more desirable for one sex than the other. Ten positive and ten negative personality characteristics were not found to be differentially desirable according to sex, and were used as "neutral" items for the social desirability scale. The M and F scores were obtained by finding the mean rating for all items in each scale; SD scores were computed in the same way after the socially undesirable items were corrected for their scored direction (by subtracting each such score from six). Bem's original method of determining the androgyny score was to subtract the F score from the M score, then to multiply the resulting difference by a standard score of 2.322 to get a t-ratio. Using a normative sample of two-thousand undergraduates, Bem (1974) found test-retest stability coefficients of .89 to .93 for a four-week interval.

Bem has since abandoned her subtractive method of defining androgyny for an additive method. Concurring with criticism (Spence, Helmreich, & Stapp, 1975) suggesting that "androgynous" should refer only to persons with high scores on both masculinity and femininity (separating

out as "undifferentiated" those persons endorsing few masculine and feminine characteristics), she now advocates use of the median-split method described above (Bem, 1977). Bernard (1980) included both the t-ratio and median-split methods in an evaluation of the impact of various BSRI scoring procedures and concluded that the median-split procedure was the preferred alternative for research purposes.

In this study, median scores for the Masculinity and Femininity scales of the 22-hour BSRIs were 5.03 and 5.04, respectively. Median scores for the M and F scales of the late BSRIs were 5.1 and 4.91, respectively. An early concern that due to the very atypical nature of this course, the present sample might consist of higher proportions of androgynous individuals than held for the general population of college students (which might produce elevated scores, misclassifications, and limited generalizability) proved unfounded. The sample medians were found to be very similar to medians from past and current research involving large samples of MSU undergraduates (ex. previous median scores on M and F were 4.26, 4.23, from Mirman, 1982; and 4.8, 5.38, from Jackson, Ialongo, & Stollak, 1983). At least in terms of median scores, the present sample proved very representative of the larger MSU population.

ARO and ARS Group Behavior Ratings. These semantic differential scales included four items each. The Acceptance versus Rejection of Others (ARO) scale included the following items: Warm--Cold; Helps others--Harms others; Accepts others--Rejects others; and Gentle--Harsh. Items from the Acceptance versus Rejection of Self (ARS) scale included Shows feelings--Hides feelings, Active--Passive, Expressive--Guarded, and Dominant--Submissive. Each person rated her/himself and every other

group member on a continuum of 0-9 for each item. These ratings were routinely collected after each group's initial postmarathon session, and members were asked to base their ratings solely upon their impressions of the behaviors of self and others over the entire series of prior group sessions, not just during the marathon. These ratings were subsequently shared in the groups to encourage communication about the interpersonal process itself, as well as for individuals to learn how their interpersonal styles were perceived by others.

The ratings were made in booklets, with the ratings for all group members, including facilitators, for one scale per page. After instructions, a 10-point Like--Dislike scale preceded the other scales. This early presentation was assumed to give raters the opportunity to ventilate strong feelings that might otherwise produce less cognitive and more emotionally-laden ratings on the following scales (Smith, 1979). The Like--Dislike scale ratings were not used in the present study.

Within a week after making these ratings, each group member received a matrix of all scale ratings for his/her group and a graphic summary of the discrepancies between each person's self-rating and the ratings given to him/her by all the others. These ratings were usually reviewed during the next session of each group. All measures employed in this study were derived from these matrices of ratings.

For each participant, four scores were computed from the midterm ratings, and four from the final ratings. ARS and ARO self-ratings were obtained directly from the matrix, and other-rated ARS and ARO scores were computed as mean ratings received from group members.

RESULTS

The median-split procedure was used to classify participants according to their sex-role self-concept as measured by the BSRI, administered after approximately 22 hours of group interaction and again near each group's end. Participants were classified into four groups (Androgynous, Masculine, Feminine, and Undifferentiated) according to early BSRI scores, and reclassified at the end of the term, using the late BSRI scores. Group composition is reported in Table 1.

There were some readily apparent shifts in individual sex-role classification over time. These shifts seemed to be an artifact of the median-split scoring procedure, where an increase in the median Masculinity score (from 5.03 to 5.1) and a decrease in the median Femininity score (from 5.04 to 4.91) on the later BSRI affected the sex-role classification of individuals with scores at or near the median of one or both scales. Since t-tests using the mean early and late scores on the M and F scales showed no significant differences in participants' mean BSRI scores over time (see Table 2), the shifts in sex-role classification do not seem to reflect meaningful changes in how participants used the scales to describe themselves. The early and late F scores were also highly correlated ($r = .72$, $p < .001$), as were the early and late M scores ($r = .81$, $p < .001$). In subsequent analysis, the early BSRI scores and resulting group classification

Table 1

Classification of 88 Participants into BSRI Categories by Data Collected Early and Late Each Term

	Early			Late		
	Men	Women	All	Men	Women	All
Androgynous	6 (18%)	18 (33%)	24 (27%)	3 (9%)	14 (26%)	17 (19%)
Masculine	14 (41%)	6 (11%)	20 (23%)	18 (53%)	12 (22%)	30 (34%)
Feminine	4 (12%)	16 (30%)	20 (23%)	7 (21%)	19 (35%)	26 (30%)
Undifferentiated	10 (29%)	14 (26%)	24 (27%)	6 (18%)	9 (17%)	15 (17%)
Totals	34	54	88	34	54	88

Table 2

Comparisons of the Masculinity, Femininity and Social Desirability Scores on the Early and Late BSRIs

	Mean	SD	t-value	Df	2-tail probability
Masculinity					
Early	4.98	.74	-1.40	87	.16
Late	5.05	.67			
Femininity					
Early	4.88	.65	-0.01	87	.99
Late	4.88	.60			
Social Desirability					
Early	4.99	.42	-1.42	87	.16
Late	5.04	.41			

were employed with the early ARO and ARS ratings by self and by others, the late BSRI scores and second group classifications with the late ARO and ARS ratings by self and by others.

Participants' ARS and ARO scores shifted more than BSRI scores during the second half of the group experience. Mean rating received from others increased quite significantly from about 22 hours of interaction to the 44-hour mark (ARS, $t = 4.78$, 87 df, $p < .001$; ARO, $t = -2.83$, 87 df, $p < .006$). Self-ratings also increased, significantly on ARS ($t = -2.32$, 87 df, $p < .02$) but only slightly on ARO ($t = -1.62$, 87 df, $p < .11$).

Participants' ARS and ARO self-ratings were also compared to ratings on those same dimensions given by other group members. For both middle and late ratings, participants rated themselves as significantly more self-accepting than other group members perceived them (midterm, $t = 4.71$, 87 df, $p < .001$; final, $t = 4.85$, 87 df, $p < .001$). Mean ARO self-ratings exceeded mean ARO ratings by others on both occasions, but not significantly, (midterm, $t = -.74$, 87 df, $p < .46$; final, $t = .47$, 87 df, $p < .63$): self-perceptions and behavioral observations by others more easily concurred on the dimension of acceptance of others than on the dimension of self-acceptance.

Relationships between sex-type and acceptance of self and of others were initially explored by examining Pearson product-moment correlations computed for all possible appropriate pairs of variables. These correlations are reported in Table 3. Using the early BSRI scores with early ARS and ARO ratings, Femininity was significantly correlated with acceptance of others, whether self-rated ($r = .25$, $p < .01$) or by others ($r = .32$, $p < .001$). Masculinity was significantly

Table 3

Intercorrelations Among All Measures (All N's = 88)[+]

		Bem Sex-Role Inventory						Interpersonal Behavior Ratings							
								Peers' Mean Ratings				Self-Ratings			
		Early			Late			22-hours		44-hours		22-hours		44-hours	
		M	F	SD	M	F	SD	ARS	ARO	ARS	ARO	ARS	ARO	ARS	ARO
	M:	-													
Early:	F:	09	-												
	SD:	28**	17	-											
BSRI															
	M:	81***	- 06	21*	-										
Late:	F:	- 11	72***	17	- 16	-									
	SD:	16	09	65***	18*	19*	-								
	ARS:	34***	- 02	02	28**	- 08	- 02	-							
22-hours:	ARO:	- 01	32***	15	- 07	43***	11	30**	-						
PEERS															
	ARS:	28**	- 03	12	30**	- 04	03	76***	29**	-					
44-hours:	ARO:	06	19*	33***	06	37***	30**	16	63***	43***	-				
RATINGS															
	ARS:	45***	- 13	04	38***	- 22*	- 05	59***	03	43***	- 02	-			
22-hours:	ARO:	- 03	25**	12	- 10	38***	09	- 20*	29**	- 23*	26**	07	-		
SELF															
	ARS:	27**	- 04	05	20*	- 00	- 01	62***	26**	68***	22*	53**	00	-	
44-hours:	ARO:	- 13	20*	26**	- 19*	45***	30**	- 10	41***	05	52***	- 03	60***	29	-

+ All decimals omitted
***p < .001 2-tailed test
** p < .01 2-tailed test
* p < .05 2-tailed test

correlated with acceptance of self, both self-reported (r = .45, p < .001) and as rated by others (r = .34, p < .001). Femininity was negatively correlated, although not significantly so, with self-acceptance, as rated by self (r = -.14, p < .10) and by others (r = -.03, p < .39), and Masculinity with acceptance of others, for both self-ratings (r = -.03, p < .39) and rating by others (r = -.01, p < .46).

Using the late BSRI scores with late ARS and ARO ratings, Femininity was again positively and significantly correlated with acceptance of others (self-rated, r = .45, p < .001; rated by others, r = .44, p < .001). Masculinity was significantly correlated with self-acceptance, although somewhat less strongly than previous correlations (self-rated, r = .20, p < .02; rated by others, r = .31, p < .002). Femininity was negatively correlated (rated by self, r = -.004, p < .49; by others, r = -.05, p < .33) with self-acceptance, Masculinity negatively correlated only with self-rated acceptance of other (r = -.19, p < .04).

Because Social Desirability, the neutral scale of the BSRI, correlated significantly with Masculinity (r = .28, p < .004) on the early BSRIs, and with both Masculinity (r = .18, p < .03) and Femininity (r = .19, p < .03) on the later BSRIs, correlations were recalculated as partial correlations, with Social Desirability held constant. The strengths of the reported relationships between Masculinity and self-acceptance, and Femininity and acceptance of others, were not significantly altered with the effect of Social Desirability held constant.

On both theoretical and statistical grounds, multivariate analysis of variance (MANOVA) seemed the most appropriate inferential technique for testing the hypothesized patterning of performance on the ARS and ARO dimensions according to sex-role self-concept. Because the construct

of interpersonal competence is defined as involving capacities for both self-acceptance and acceptance of others, both measures of these capacities, the two dependent variables ARS and ARO, need to be held together in analysis. Also, the specific hypotheses relating sex-role self-concept to interpersonal competence concerned expected patterns of performance (ex. high-high, high-low, etc.) on the two dimensions. Statistically, using more than one ANOVA on a single set of data increases the probability of obtaining significant results as the number of statistical tests increases. MANOVA allowed for the simultaneous testing of the two dependent variables.

Means and standard deviations for ARS and ARO ratings by self and by others at the midpoint of the term were computed for the four groups defined by the early BSRI. Similar computations were made for the four groups defined by the late BSRI, using the final ratings. These descriptive statistics appear in Table 4. Graphic representations of the pattern of score according to sex-type are presented in Figures 1 and 2.

MANOVA results are presented in Appendix A. By design, the analyses tested the effects of sex-type and sex, sex, and specified planned contrasts between the androgynous group and each of the other three groups. Neither the interactive effect of sex-type by sex or gender sex itself were significant, therefore allowing testing of the effect of sex-type alone. Each contrast was tested separately to prevent significant contrasts from confounding the following contrasts.

The androgynous group showed the expected pattern (see Figure 1A) of high performance on both ARS and ARO measures as self-rated at midterm (22-hour data). In contrast to the androgynous group, undifferentiated subjects rated themselves as being significantly

Table 4

Means and Standard Deviations (in Parentheses) of Early and Late ARS/ARO Ratings by Groups

	ARS	ARO
Early		
Self-ratings		
Androgynous	27.54 (5.79)	27.66 (5.27)
Masculine	28.25 (4.45)	24.05 (6.57)
Feminine	21.15 (8.33)	27.20 (4.46)
Undifferentiated	23.25 (6.69)	24.95 (6.30)
Ratings by others		
Androgynous	23.37 (6.75)	26.43 (3.36)
Masculine	23.92 (6.77)	23.74 (4.82)
Feminine	20.27 (5.64)	26.20 (3.96)
Undifferentiated	20.28 (7.54)	25.64 (3.74)
Late		
Self-ratings		
Androgynous	28.47 (6.33)	29.47 (3.93)
Masculine	26.53 (6.39)	24.30 (6.23)
Feminine	25.42 (4.70)	29.07 (3.26)
Undifferentiated	26.80 (5.15)	24.93 (4.84)
Ratings by others		
Androgynous	25.56 (6.57)	28.66 (2.75)
Masculine	25.06 (5.85)	25.35 (3.63)
Feminine	22.85 (5.86)	28.08 (3.50)
Undifferentiated	23.36 (5.75)	24.08 (4.09)

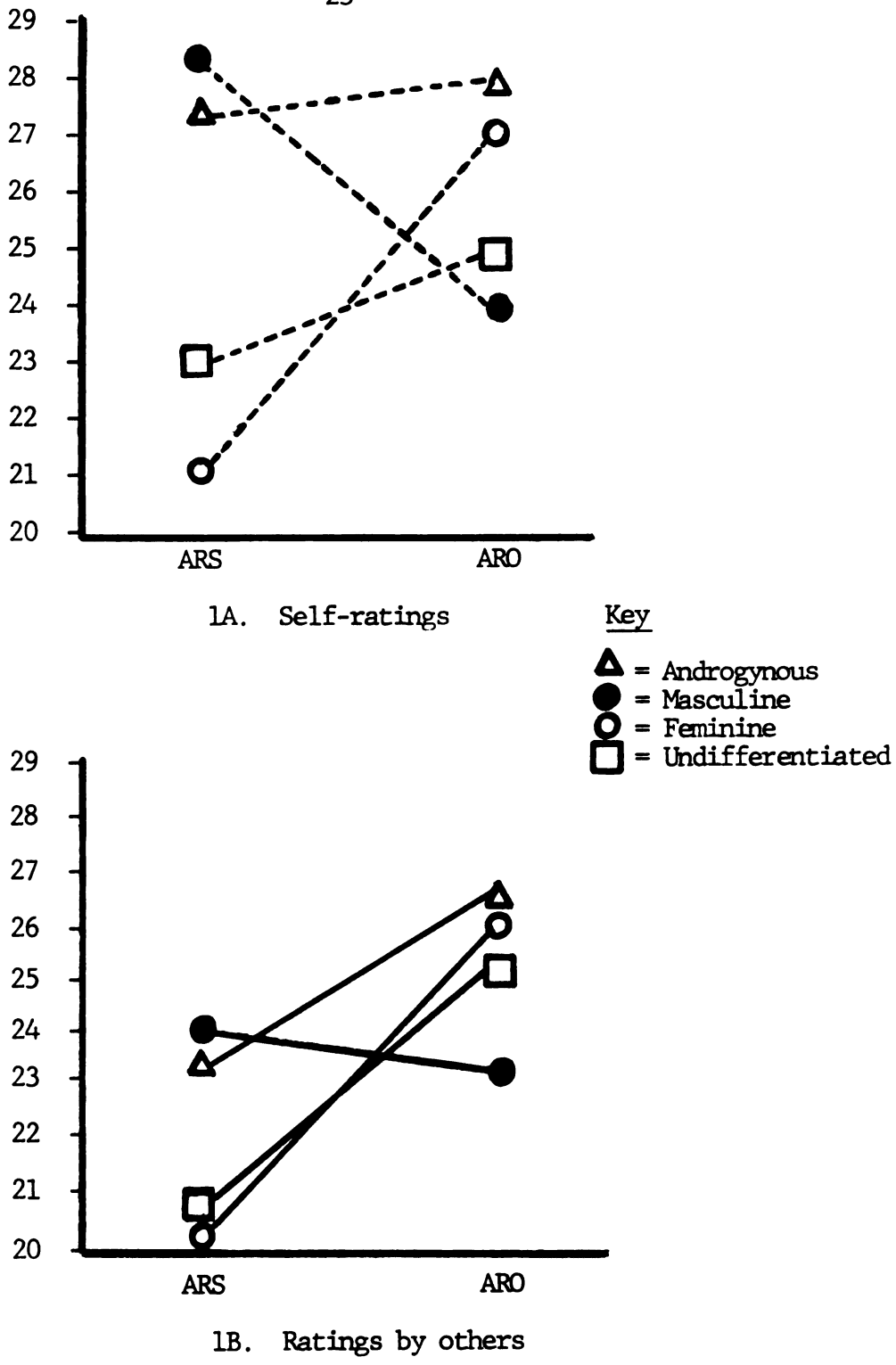

Figure 1. Patterns of ARS/ARO responding by sex-type using early data.

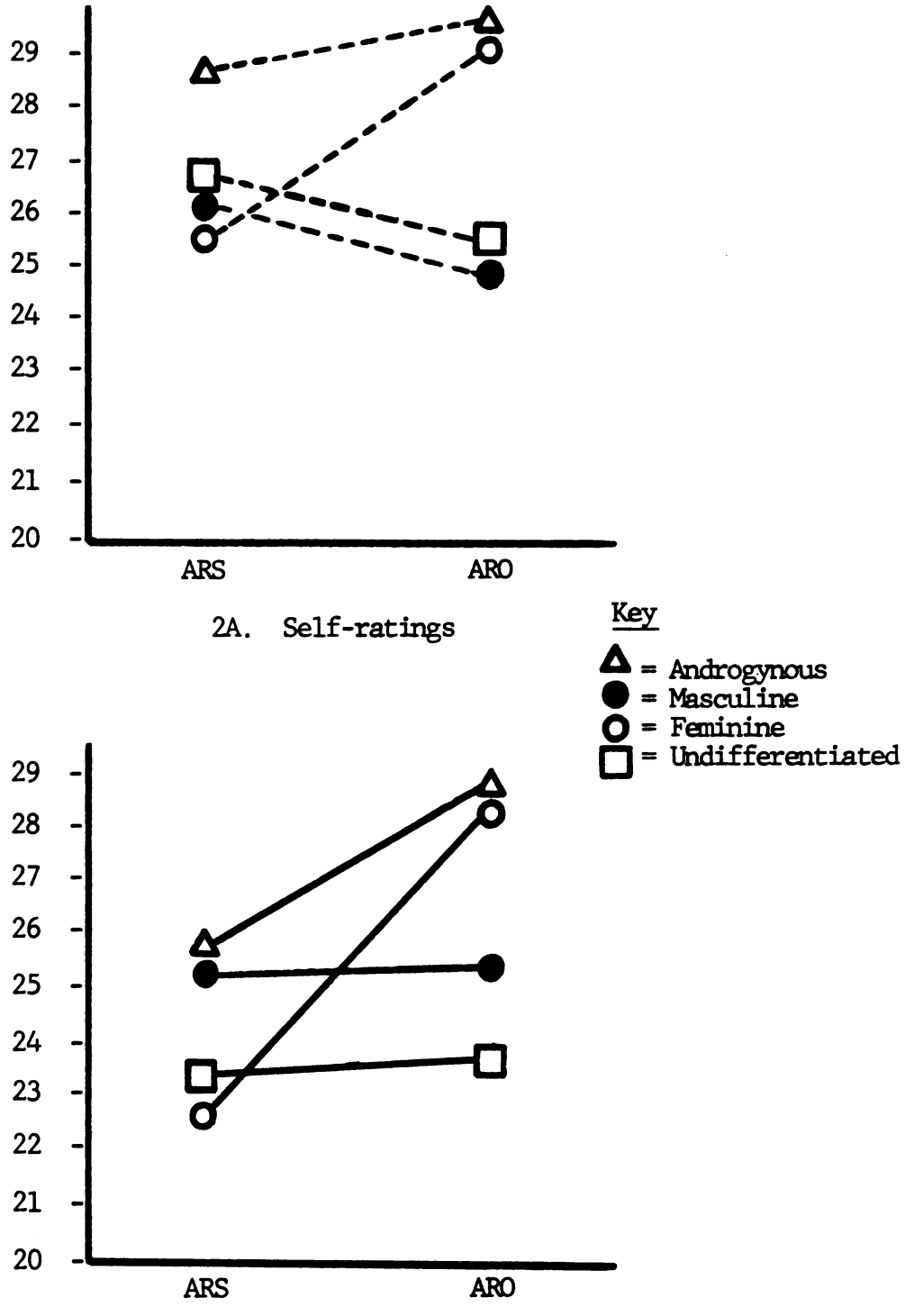

Figure 2. Patterns of ARS/ARO responding by sex-type using late data.

less self-accepting and accepting of others ($p < .02$), with lowered self-acceptance contributing more to the overall difference in interpersonal competence (univariate results, $p < .02$). Feminine sex-typed subjects as a group were also significantly different ($p < .006$) from the androgynous group, reporting markedly low self-acceptance and almost comparably high acceptance of others. The masculine sex-typed group showed the predicted pattern of high self-acceptance and low acceptance of others, although this group did not quite differ significantly ($p < .072$) from the androgynous group. This lack of difference is the result of the contribution of self-reported masculine self-acceptance, higher even than androgynous self-acceptance, since univariate results furnished along the MANOVA statistics indicate significant differences between the masculine and androgynous groups on the variable of acceptance of others ($p < .02$).

When rated by other group members near midterm (see Figure 1B), masculine, androgynous, undifferentiated, and feminine groups were seen as decreasingly self-accepting in the same order indicated in self-ratings; androgynous, feminine, undiffereniated, and masculine groups were decreasingly accepting of others in parallel order. Major differences between patterns formed by self-ratings and ratings by others centered around the masculine subjects' parallel performance on ARS and ARO in contrast to the relatively greater acceptance of others (compared to observed self-acceptance) claimed for androgynous, feminine, and undifferentiated groups. Thus, masculine subjects were perceived as nearly equally accepting of self and of others, while androgynous, feminine, and undifferentiated were viewed as more accepting of others

than accepting of self. Although the androgynous group was more self-accepting than either the undifferentiated or feminine group, all three were similarly high in acceptance of others, such that comparisons between the androgynous versus feminine group, and androgynous versus undifferentiated group, reflected no significant differences. Androgynous subjects were, however, significantly more interpersonally competent than masculine subjects ($p < .05$), primarily in being seen as significantly more accepting of others ($p < .02$).

At the end of the term/group experience, the patterns of self-rated scores on ARS and ARO showed some interesting shifts (see Figure 2A). The androgynous group continued to report themselves as highly self-accepting and accepting of others, and the feminine group least self-accepting but second-highest in acceptance of others. The masculine group, however, now saw themselves as less self-accepting and accepting of others than the undifferentiated group, with their decreased ARS still above their ARO. The androgynous group was not significantly different from the feminine group, primarily because of these two groups' high self-rated capacities for accepting others. Androgynous subjects did see themselves as significantly more self-accepting and accepting of others than both masculine ($p < .003$) and undifferentiated ($p < .03$) subjects, particularly in terms of acceptance of others (masculine, $p < .001$; undifferentiated, $p < .01$).

When rated by other group members near term end (see Figure 2B), groups showed the following pattern: androgynous, high ARS, even higher ARO; masculine, similar balance on ARS/ARO; undifferentiated, lower but similar balance on ARS/ARO; and feminine, low ARS, high ARO. As in the self-rated contrasts, the androgynous group was significantly more interpersonally competent than the masculine ($p < .005$) and

undifferentiated ($p < .002$) groups, particularly in being more accepting of others (univariate ARO; masculine, $p < .003$, undifferentiated, $p < .001$). The androgynous group was not significantly different from the feminine group in interpersonal competence.

DISCUSSION

The results of this study clarified the relationship of sex-role identity and interpersonal competence, as manifested in behavioral measures of self-acceptance (ARS) and acceptance of others (ARO). Strong associations of masculinity with self-acceptance, and femininity with acceptance of others, were revealed in both self-ratings and peers' ratings. These associations were basic to later tests of the performance of specific sex-types with respect to these same two variables. Androgynous, masculine, feminine, and undifferentiated groups of participants showed both predicted and surprising patterns of interpersonal competence, with the strength or significance of differences between the androgynous group and the other three groups depending on the source of perceptions (self versus peers), and other factors to be discussed. These findings lend general support for the concept of psychological androgyny. They also appear to validate the ecological or contextual concerns that motivated the particular design of this study. Implications for future research follow from the noted strengths and limitations of measures, sample, and design of this study.

The discovery of strong positive correlations of femininity with acceptance of others, and masculinity with acceptance of self, whether self-reported or as rated by others in both early and late data collections, encouraged further exploration of various combinations of masculinity and femininity of specific sex-types and their corresponding patterns of interpersonal competence. Initial hypotheses attempted to

predict these patterns for androgynous, masculine, feminine, and undifferentiated participants. Androgynous individuals were predicted to be viewed by self and others as relatively high in both self-acceptance and acceptance of others, demonstrating greater interpersonal competence than their peers, as a measure of positive adjustment/functioning. Thus, not only specific patterns but comparisons of all groups with the androgynous group were of significant interest. The pattern predicted for masculine sex-typed individuals was of greater self-acceptance than acceptance of others; feminine sex-typed subjects should show the reverse pattern of greater acceptance of others than self-acceptance. Participants indicating little sex-role differentiation were expected to be relatively low on both dimensions.

For the four groups formed by the midterm BSRI scores, self-ratings on acceptance of self of others showed the expected patterning with some slight variations. Notable were the masculine group's high self-acceptance, even higher than the androgynous group's, and the feminine group's low self-acceptance, even below that of the undifferentiated group. Significant differences were found between the androgynous versus undifferentiated, and androgynous versus feminine groups. The lack of such differences between the androgynous and masculine groups was the result of similarly strong scores on self-acceptance, although these groups differed importantly in terms of acceptance of others.

When rated by others, scoring patterns shifted somewhat. While both self-perceptions and ratings of other agreed on the four groups' relative ranking on the two dimensions, other group members rated <u>all</u> sex-types as less self-accepting than had their self-reports.

Consequently, group differences in self-acceptance were less extreme than they were for self-ratings. Peers' ratings of acceptance of others were more similar to self-ratings. Perhaps group feedback is more influential on self-perceptions when it concerns how an individual actually treats others, than when it concerns self-accepting or rejecting behaviors.

Given these lower peer-based self-acceptance ratings, the androgynous, undifferentiated, and feminine groups had lower self-acceptance compared to higher acceptance of others, with the masculine group presenting almost equal scores in both. Because of the less extreme differences in self-acceptance and similarly high acceptance of others, the androgynous group differed significantly only from the masculine group, not from either the undifferentiated or feminine groups.

Using the four groups generated by the second set of BSRI scores and the later set of behavior ratings, the self-rated relative patterns for the androgynous and feminine groups were as predicted: high-high and low-high, respectively. The undifferentiated and masculine groups, however, reported similarly high self-acceptance and somewhat lower acceptance of others, with the masculine group rated slightly below the undifferentiated group on both dimensions. Undifferentiated persons had been predicted to be lower in self-acceptance. The androgynous group was significantly more interpersonally competent than both the masculine and undifferentiated groups, although not significantly different than the feminine group, largely because of the latter's similarly high acceptance of others. As before, ratings by other group members

near term end portrayed all sex-types as less self-accepting than self-reported, but used similarly high ratings on acceptance of others. Androgynous, feminine, and undifferentiated subjects showed their predicted high-high, low-high, and low-low patterns, respectively, while the masculine group showed a relatively balanced performance on both dimensions. They apparently were not viewed as either so self-accepting and rejecting of others as they viewed themselves, or as had been predicted (high-low). By both self-ratings and ratings by others, the androgynous group was significantly more interpersonally competent near term's end than either the masculine or undifferentiated group, but not the feminine group, with their similar capacity for acceptance of others.

These two sets of findings, serving as a semi-replication, provided broad support for the patterning hypotheses, particularly in terms of androgynous individuals being seen by both self and others as relatively high in self-acceptance and acceptance of others, and feminine persons being seen as less self-accepting and very accepting of others. Masculine individuals generally seemed to have greater relative difficulty in accepting others, whatever their levels of self-acceptance. Undifferentiated persons seemed to have greater self-acceptance than feminine individuals and often showed varying degrees of acceptance of others. With masculinity and femininity being strongly associated with self-acceptance and acceptance of others, respectively, the androgynous individual, claiming both types of traits, was thus more likely to be both self-accepting and accepting of others in an interpersonally competent fashion, since both capacities are necessary for successful social interaction.

In considering directions for future research, some discussion of the strengths and limitations of the measures, sample, and design of this present study seems helpful. Using the BSRI and the ARS and ARO ratings at two points in time allowed for tests of the stability of the two measures. Both self-ratings (mean $\underline{r}$ = .57) and ratings by peers (mean $\underline{r}$ = .70) on the two dimensions were reasonably stable over time, with ratings by peers somewhat more stable (see Table 3). Scores on the M and F scales of the BSRI were also stable, as noted earlier. However, the median-split procedure used to classify participants according to sex-role identity was problematic. Some individuals shifted classification with the repeated administration of the BSRI which seemed to be artifacts of that scoring procedure and not genuine indications of psychologically meaningful changes in sex-role identity. The use of single-sample medians in research classification also makes comparisons of results from studies using diverse samples difficult; for example, undifferentiated participants with scores just below the M and F medians for one study's sample might be classified as androgynous in a different study sample with slightly lower median scores.

Perhaps a different scoring procedure or method for using the information from the M and F scores in data analysis would address these concerns. By dichotimizing the scores, the current procedure discards valuable information that continuous scores contribute. In studies where the androgynous group is compared with "all other subjects," the results often mask the relative contributions of each scale, i.e., the differences found may be the result of one scale only, M $\underline{\text{or}}$ F. This present study recovered some of the information lost in the current scoring procedure through its design and data analysis:

through correlations between M and F and all other variables and through the planned contrasts between the androgynous group and all of the other three groups separately.

These contrasts also indirectly provided support for the theoretical and empirical distinctions between psychological sex or sex-type and biological sex, one of the original concerns which prompted the development of new measures of sex-role identity such as the BSRI. Neither biological sex or the interaction of sex and sex-type had any significant effects in the various analyses of these data. Sex-type alone was responsible for the significant differences between groups.

In comparing the androgynous group to the masculine, feminine, and undifferentiated groups separately, multivariate analysis allowed both the ARS and ARO scores to be treated simultaneously. Thus this statistical technique was a very appropriate test for the theoretical construct of interpersonal competence, defined in terms of acceptance of self and acceptance of others. Univariate results furnished as a part of the analysis also made it possible to see the relative contributions of each dimension to the total analysis. Using both self-ratings and peers' ratings provided two sets of information: the relationship of sex-role identity to self-perceived interpersonal competence and also to interpersonal competence as observed and evaluated by others.

As noted before, this study served in part as its own replication, since both measures were given together twice, although at different points in life of the group. Because of the shifts in individual sex-role classification, the composition of the four groups over time is not constant, and thus the results using the two sets of ARS and

ARO ratings cannot be compared for changes over time. However, the two sets of results can be compared in a replicative sense.

The sample used here was college students involved in small groups as part of a psychology course. The question of high-score homogeneity of the sample with regard to sex-role identity (i.e., more likely to produce elevated medians compared to other samples) was addressed earlier: these results appear generalizable to at least the larger MSU college population. Because sex-role identity, like other aspects of personal identity, may vary developmentally, sampling other developmental stages before and beyond the college years may yield different results. These results may thus be limited in their generalizability, applicable primarily for a particular developmental stage, i.e., young adulthood.

This sample also had somewhat restricted ranges of ARS and ARO scores. Such homogeneity reduces the chances of significant findings, so the significant relationships discovered here appear likely to be even stronger among groups more heterogeneous in level of interpersonal skills.

This study looked at androgynous functioning using a possibly more communal criterion, that of interpersonal competence, in an ecology where both agentic and communal qualities were highly valued. Perhaps because of the criterion and context, the differential effects of androgyny for males and females often found in other studies (cited p. 4) were not observed here (sex by sex-type interactions). These small groups are certainly contrived environments. Even the psychology course of which they are part is a unique academic experience, quite different from the larger, more impersonal, basic psychology courses. The nature of these groups and this course, with their emphasis on interpersonal

behavior, is what makes them attractive to students and to this researcher. However, the very uniqueness of this setting, particularly in terms of its underlying values (which may differ from those of the more agentically-oriented, larger society) limits the generalizability of results obtained in this context. While this may pose a problem for the science of personality, it raises larger issues of social values for those advocates of androgyny whose work on the psychological functioning of men and women has led them to offer societal critiques, as well as liberating psychological perspectives and models.

Given the results of this study done in the "mini-culture" of small, interpersonal groups, a fruitful new avenue for future explorations of androgyny might be in the search for natural contexts where communal and agentic competencies are equally valued. These contexts may be the seedbeds where androgyny is nurtured, the present hothouses where it flourishes. If androgyny is indeed "a more human standard of psychological health,"[3] (Bem, 1974) as we reformulate our views on sex-role identity, we may also need to reexamine the underlying values which shape the social contexts in which that identity is lived out.

APPENDIX

APPENDIX A

APPENDIX A

Wilks Test Results for Multivariate Analysis of Variance Using ARS and ARO Scores, Followed by Univariate F-test (1, 80) Results

Planned Contrasts	Value	Estimate of F	Hypothesis DF/ Hypothesis MS*	Error DF/ Error MS*	F*	Significance of F
Early Data						
Self-ratings						
Androgynous versus masculine	.935	2.723	2.00	79.00		.072
ARS			5.473	40.428	.135	.714
ARO			142.693	27.494	5.189	.025
Androgynous versus feminine	.878	5.442	2.00	79.00		.006
ARS			445.673	40.428	11.023	.001
ARO			2.375	27.494	.086	.770
Androgynous versus undifferentiated	.909	3.946	2.00	79.00		.023
ARS			221.020	40.428	5.466	.022
ARO			88.020	27.494	3.201	.077

APPENDIX A (Cont.)

Planned Contrasts	Value	Estimate of F	Hypothesis DF/ Hypothesis MS*	Error DF/ Error MS*	F*	Significance of F
Ratings by others						
Androgynous versus masculine	.926	3.119	2.00	79.00		.050
ARS			3.240	46.593	.069	.793
ARO			79.086	15.595	5.071	.027
Androgynous versus feminine	.971	1.169	2.00	79.00		.316
ARS			104.836	46.593	2.250	.138
ARO			.615	15.595	.039	.843
Androgynous versus undifferentiated	.969	1.228	2.00	79.00		.298
ARS			114.700	46.593	2.461	.121
ARO			7.608	15.595	.487	.487

APPENDIX A (Cont.)

Planned Contrasts	Value	Estimate of F	Hypothesis DF/ Hypothesis MS*	Error DF/ Error MS*	F*	Significance of F
Late Data						
Self-ratings						
Androgynous versus masculine	.865	6.145	2.00	79.00		.003
ARS			40.723	34.065	1.195	.278
ARO			290.103	23.313	12.443	.001
Androgynous versus feminine	.965	1.428	2.00	79.00		.246
ARS			95.465	34.065	2.802	.098
ARO			1.592	23.330	.068	.794
Androgynous versus undifferentiated	.919	3.476	2.00	79.00		.036
ARS			22.239	34.065	.652	.421
ARO			164.050	23.313	7.036	.010

APPENDIX A (Cont.)

Planned Contrasts	Value	Estimate of F	Hypothesis DF/ Hypothesis MS*	Error DF/ Error MS*	F*	Significance of F
Ratings by others						
Androgynous versus masculine	.874	5.685	2.00	79.00		.005
ARS			2.754	35.894	.077	.782
ARO			118.983	12.551	9.479	.003
Androgynous versus feminine	.973	1.065	2.00	79.00		.350
ARS			75.752	35.894	2.110	.150
ARO			3.504	12.551	.279	.599
Androgynous versus undifferentiated	.850	6.968	2.00	79.00		.002
ARS			38.733	35.894	1.079	.302
ARO			167.499	12.551	13.345	.001

*refers to univariate results

REFERENCES

FOOTNOTES

[1]Ellen Lenny, "Androgyny: Some audacious assertions toward its coming of age." Sex Roles, 5(6), (December, 1979): 704.

[2]Sandra Bem, "The measurement of psychological androgyny," Journal of Consulting and Clinical Psychology, 42, 1974: 162.

[3]Ibid.

REFERENCES

Allegeier, E.R. (1976, May). Heterosexuality and sex typing. Paper presented at the meeting of the Midwestern Psychological Association, Chicago.

Bakan, D. (1966). The duality of human existence. Chicago: Rand McNally.

Bem, S.L. (1974). The measurement of psychological androgyny. Journal of Consulting and Clinical Psychology, 42, 155-162.

Bem, S.L. (1975). Sex-role adaptability: One consequence of psychological androgyny. Journal of Personality and Social Psychology, 31, 634-643.

Bem, S.L. (1977). On the utility of alternative procedures for assessing psychological androgyny. Journal of Consulting and Clinical Psychology, 42, 196-205.

Bem, S.L., & Lenney, E. (1976). Sex-typing and the avoidance of cross-sex behavior. Journal of Personality and Social Psychology, 33, 48-54.

Bem, S.L., Martyna, W., & Watson, C. (1976). Sex-typing and androgyny: Further explorations of the expressive domain. Journal of Personality and Social Psychology, 34, 1016-1023.

Benjamin, L.S. (1977). Structural analysis of a family in therapy. Journal of Consulting and Clinical Psychology, 45, 391-406.

Benjamin, L.S. (1979). Structural analysis of differentiation failure. Psychiatry, 42, 2-23.

Benjamin, L.S. (1981). A psychosocial competence classification system. In J. Wine & M. Smye (Eds.), Social competence (pp. 189-231). New York: Guilford Press.

Bernard, L.C. (1980). Multivariate analysis of new sex role formulations and personality. Journal of Personality and Social Psychology, 38, 323-336.

Berzins, J.I., Welling, M.A., & Wetter, R.E. (1978). A new measure of psychological androgyny based on the personality research form. Journal of Consulting and Clinical Psychology, 46, 126-138.

Block, J.H. (1973). Conceptions of sex-role: Some cross-cultural and longitudinal perspectives. American Psychologist, 28, 512-526.

Brooks, L., & Birk, J.M. (1975, August-September). Do androgynous models generate androgynous counselors? Paper presented at the meeting of the American Psychological Association, Chicago.

Constantinople, A. (1973). Masculinity-femininity: An exception to a famous dictum. Psychological Bulletin, 80, 289-307.

Foa, V.G. (1961). Convergencies in the analysis of the structure of interpersonal behavior. Psychological Review, 68, 341-353.

Freedman, M., Leary, T., Ossario, A., & Coffey, H. (1950). Social implications of the group therapy situation. Journal of Social Issues, 6, 44-61.

Gerstenhaber, L.M. (1975). Acceptance versus rejection of other and self in personality self-reports (Doctoral dissertation, Michigan State University, 1974). Dissertation Abstracts International, 36, 44B-442B.

Gough, H.G. (1964). California Psychological Inventory: Manual. Palo Alto: Consulting Psychogists Press.

Hathaway, S.R., & McKinley, J.C. (1943). The Minnesota Multiphasic Personality Inventory. New York: Psychological Corporation.

Heilbrun, A.B. (1976). Measurement of masculine and feminine sex role identities as independent dimensions. Journal of Consulting and Clinical Psychology, 44, 183-190.

Hurley, J.R. (1976). Helpful behaviors in groups of mental health professionals and undergraduates. International Journal of Group Psychotherapy, 26, 173-189.

Hurley, J.R. (1980). Two interpersonal dimensions relevant to group and family therapy. In L.R. Wolberg & M.L. Aronson (Eds.), Group and family therapy, 1980 (pp. 65-78). New York: Brunner/ Mazel.

Hurley, J.R. (1983). (Correlations among measures of the principal dimensions of interpersonal behavior). Unpublished raw data.

Jackson, L.A., Ialongo, N., & Stollak, G.E. (1983, August). Another look at parental antecedents of sex-role development. Paper presented at the meeting of the American Psychological Association, Anaheim, CA.

Jones, W., Chernovetz, M.E., & Hansson, R.O. (1978). The enigma of androgyny: Differential implications for males and females? Journal of Consulting and Clinical Psychology, 46, 298-313.

Kamens, L., & Liss-Levinson, N. (1975, August-September). Effect of sex-role on career development and aspirations. Paper presented at the meeting of the American Psychological Association, Chicago.

Kaplan, A.G., & Sedney, M.A. (1980). Psychology and sex-roles: An androgynous perspective. Boston: Little, Brown.

Kristal, J., Sanders, D., Spence, J.T., & Helmreich, R. (1975). Inferences about the femininity of competent women and their implications for likability. Sex Roles: A Journal of Research, 1, 33-40.

Lenney, E. (1979, December). Androgyny: Some audacious assertions toward its coming age. Sex Roles: A Journal of Research, 5, 703.

Lieberman, M.A., Yalom, I.D., & Miles, M.B. (1973). Encounter groups: First facts. New York: Basic Books.

Lorr, M., Bishop, P.F., & McNair, D.M. (1965). Interpersonal types among psychiatric patients. Journal of Abnormal Psychology, 70, 468-472.

Mirman, M.C. (1982). The effects of level of self-awareness on the self-presentation of individuals varying in reported sex-role orientation. Unpublished master's thesis, Michigan State University, East Lansing.

Schaefer, E.S. (1961). Converging conceptual models for maternal behavior and child behavior. In J.C. Glidewell (Ed.), Parental attitudes and child behavior (pp. 124-253). Springfield, IL.: Charles C. Thomas.

Silvern, L.E., & Ryan, V.L. (1979). Self-rated adjustment and sex-typing on the Bem Sex Role Inventory: Is masculinity the primary predictor of adjustment? Sex Roles: A Journal of Research, 5, 739-763.

Smith, J.A. (1979). Use of the disliked--liked scale in interpersonal ratings. Unpublished master's thesis, Michigan State University, East Lansing.

Spence, J.T., Helmreich, R., & Stapp, J. (1974). The Personal Attributes Questionnaire: A measure of sex role stereotypes and masculinity-femininity. Journal Supplement Abstract Service Catalog of Selected Documents in Psychology, 4, 43, Ms. No. 617.

Spence, J.T., Helmreich, R., & Stapp, J. (1975). Ratings of self and peers on sex role attributes and their relation to self-esteem and conceptions of masculinity and femininity. Journal of Personality and Social Psychology, 32, 29-39.

Terman, L., & Miles, C.C. (1936). Sex and personality. New York: McGraw-Hill.

White, M.S. (1979). Measuring androgyny in adulthood. Psychology of Women, 3, 293-307.

Wiggins, J.S. (1982). Circumplex models of interpersonal behavior in clinical psychology. In P.C. Kendall & J.N. Butcher (Eds.), Handbook of research methods in clinical psychology (pp. 183-221). New York: Wiley.