

**AN INVESTIGATION OF THE RELATIONSHIP BETWEEN
ANDROGYNY AND SELF-ACTUALIZATION AMONG
25- TO 40-YEAR-OLD UNDERGRADUATES**

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An Abstract
Presented to the
Graduate and Research Council of
Austin Peay State University

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts

by
Tommie Lackman
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ABSTRACT

The Bem Sex-Role Inventory and the Personal Orientation Inventory were administered to 100 undergraduates between the ages of 25 and 40 to test the relationship between androgyny and self-actualization. It was hypothesized (a) that the two variables were positively correlated, (b) that androgynous subjects would have higher self-actualization scores than sex-typed subjects, (c) that sex-typed subjects would have higher self-actualization scores than undifferentiated subjects, and (d) that self-actualization scores would not differ in relation to biological gender. Results offered full support for the first hypothesis, limited evidence for the first, and no basis for the second and third. Findings suggested that androgyny and self-actualization are positively correlated among 25- to 29-year-old males, that self-actualization is associated with masculinity but not with femininity, that neither sex-role orientation nor biological gender is a factor in self-actualization level, and that time competence is positively associated with age.

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To the Graduate and Research Council:

I am submitting herewith a Thesis written by Tommie Lackman entitled "An Investigation of the Relationship Between Androgyny and Self-Actualization Among 25- to 40-Year-Old Undergraduates." I have examined the final copy of this paper for form and content, and I recommend that it be accepted in partial fulfillment of the requirements for the degree Master of Arts, with a major in Psychology.

Susan Karpisak Ph.D.
Major Professor

We have read this thesis and
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TABLE OF CONTENTS

	PAGE
LIST OF TABLES	vii
CHAPTER	
1. INTRODUCTION	1
2. REVIEW OF LITERATURE	4
Concepts	4
Assessment Instruments	7
Androgyny	7
Self-Actualization	8
Related Research	9
Studies Using Unspecified Actualization	
and Androgyny Measures	9
POI Studies with Other Sex-Role Measures . . .	10
POI and BSRI Studies	13
Self-Actualization and Androgyny Comparisons	
Using the POI and BSRI	14
Hypotheses	17
3. METHODOLOGY	19
Subjects	19
Instruments	19
Procedure: Administration and Scoring	20
4. RESULTS	23
5. DISCUSSION	31
REFERENCES	39
APPENDIX	50

LIST OF TABLES

TABLE	PAGE
1. Correlations for Androgyny and Self- Actualization Within Age and Gender Groups	24
2. Sex-Role Assignment by Gender	26
3. Differences in Self-Actualization Within Sex-Role and Age Groups	27
4. Gender Differences in Self-Actualization Within Age Groups	28
5. Correlations for Age with Self- Actualization and Androgyny	30

CHAPTER 1

Introduction

For years, society has tended to view mental health from the perspective of a pink-and-blue dichotomy. Optimal adjustment has meant masculinity for males and femininity for females (Bem, 1974, 1975a, 1975b; Major, Carnevale, & Deaux, 1981). Masculinity and femininity have been conceived of as bipolar dimensions, boundaries to be crossed only by the aberrant.

Within the past decade, however, investigators have begun examining traditional sex-role standards more critically for possible limiting effects these societal prescriptions may have on personal growth. For instance, favorable adjustment and self-esteem are associated with masculinity but not with femininity (Silvern & Ryan, 1983). Further, research has suggested that competence, rationality, and assertion are generally considered to be masculine characteristics and that these traits tend to be positively valued more often than the expressiveness and warmth ascribed to women (Broverman, Vogel, Broverman, Clarkson, & Rosenkrantz, 1972). According to Block (1973), "the achievement of higher levels of ego function for women is more difficult because individuation involves conflict with our prevailing cultural norms" (p. 526). More recently, Alperson and Friedman (1983) observed that women seeking to adopt the more culturally esteemed male role are still apt to be

met with considerable resistance.

The behavior of both traditionally feminine women and masculine men tends to be more role-restricted than situationally flexible. In studying the expressive domain for example, Bem (1975b) found that "masculine males displayed masculine independence, but not feminine playfulness, and feminine females displayed feminine playfulness, but not masculine independence" (p. 642). Role-related con- striction is apparent in the functional domain as well. For example, sex-typed individuals are likely to avoid performing simple cross-sex activities (i.e., for men, preparing a baby bottle, and for women, nailing two boards together) even when offered monetary incentives to do so and to report discomfort and temporary loss of esteem when required to participate in such tasks (Bem & Lenney, 1976).

Sandra L. Bem (1974, 1975a, 1975b, 1981a; Bem & Lenney, 1976) has proposed androgyny as a more plausible criterion for optimum mental health. "Our current system of sex role differentiation has long since outlived its usefulness and . . . now serves only to prevent both men and women from developing as full and complete human beings" (Bem, 1975b, p. 634).

Although research has tended to support her contention that androgyny is good, several writers have suggested that it is the masculine/instrumental aspect of androgyny rather than the contribution of both masculine and feminine

qualities that results in its supposed goodness (Antill & Cunningham, 1979; Deaux, 1984; Della Selva & Dusek, 1984; Harrington & Andersen, 1981; Kelly & Worell, 1977; Murstein & Williams, 1983; Senneker & Hendrick, 1983; Silvern & Ryan, 1983; Swenson & Ragucci, 1984). A possible explanation according to Flaherty and Dusek (1980) is that the relation of masculinity and femininity to mental health depends upon what aspect of mental health is being measured. At issue is whether a test is designed to reflect an instrumental (traditionally masculine) or an expressive (traditionally feminine) orientation.

Thus far, no research has been conducted aimed solely at testing androgyny's presumed goodness against a global backdrop of psychological health, incorporating both instrumentality and expressiveness, since Bem reformulated her concept of androgyny in 1977. The present investigation was designed to address this issue. Specifically, this study focused upon the relationship between androgyny and self-actualization.

CHAPTER 2

Review of Literature

Concepts

Androgyny is a best-of-both concept involving the integration of masculine as well as feminine qualities. According to Bem (1981a), the underlying factor is flexibility enabling one "to be both compassionate and assertive, both expressive and instrumental, both feminine and masculine, depending upon the situational appropriateness of these various modalities" (p. 4).

In contrast to their traditional counterparts, androgynous individuals are more situationally adaptable (Bem, 1975a, 1975b, 1977; Bem & Lenney, 1976; Bem, Martyna, & Watson, 1976), less likely to organize information according to sex-role-related associations (Bem, 1981b, 1981c, 1983), and less differentially responsive to another person based on supposed physical attributes (Anderson & Bem, 1981; Bridges, 1981). They are seen as being more creative (Harrington & Andersen, 1981; Jones, Chernovetz, & Hanson, 1978), more apt to aid someone in distress (Senneker & Hendrick, 1983), and more socially desirable (Baumrind, 1982; Bridges, 1981; Holleran, Staszkievicz, & Lopez, 1983; Major et al., 1981). Finally, several researchers have associated androgyny with psychological health or adjustment (Della Selva & Dusek, 1984; Flaherty & Dusek,

1980; Heilburn, 1976; Hinrichsen, Follansbee, & Ganellen, 1981; Major et al., 1981; O'Connor, Mann, & Bardwick, 1978; Wiggins & Holzmuller, 1978). Block (1973), for instance, equates androgyny with the highest level of ego development.

Likewise, self-actualization is considered an optimal expression of potential. The concept was developed by Maslow (1954, 1968, 1971) as a higher order need for full personal functioning. In his 1954 book, he defined it as "the desire to become more and more what one idiosyncratically is, to become everything one is capable of becoming" (p. 92). Self-actualization is marked by a here-and-now orientation, autonomy, and comfortableness with self counterbalanced with a concern for and an acceptance of others. Components include situational flexibility, spontaneity in behavioral expression of feelings, and development of meaningful interpersonal relationships not bound by expectations and obligations (Shostrom, 1974).

Self-actualization has been associated with psychosocial maturity (Olczak & Goldman, 1975), field independence (Doyle, 1975a), autonomy (Grossack, Armstrong, & Lussiev, 1966), assertiveness (McVicar & Herman, 1983; Shostrom, 1974), and extraversion (Dahl, Wakefield, Kimlicka, & Wiederstein, 1983). Actualizing persons tend to be more liberated from social pressures to conform than is the relatively non-actualizing individual (Goldman & Olczak, 1975; Hyman, 1979) and more willing to accept an egalitarian

relationship in marriage (Wise & Strong, 1980). They tend to be self-assured, emotionally stable, sociable, and adventurous (Shostrom, 1974). Increases in level of self-actualization have been associated with participation in various humanistically oriented therapies (summarized in Knapp, 1976), encounter group experiences (summarized in Hyman, 1979; Knapp, 1976; Shostrom, 1974), and activities such as Outward Bound which force persons to consider themselves in new ways (Vander Wilt & Klocke, 1974).

In essence, both androgyny and self-actualization imply a sense of spontaneity and authenticity that may be described as both a freedom to be and a competency in being. Like androgyny, self-actualization also connotes a transcendence of traditional dichotomies. According to Maslow (1971),

Concomitant with this is a desexualizing of the statuses of strength and weakness, and of leadership so that either man or woman can be, without anxiety and without degradation, either weak or strong as the situation demands. (p. 161)

Further, Lubinski, Tellegen, and Butcher (1981, 1983) suggest that androgyny is one aspect of the more global concept of self-actualization. In their 1981 article, they note that "all such concepts appear to imply the idea that a 'fully functioning' person integrates various and contrasting attributes in a synergistic manner, such that the whole is more than the sum of parts" (p. 729).

Assessment Instruments

Androgyny.

Among the four major self-report measures designed to assess androgyny, the Bem Sex-Role Inventory (BSRI) and the Personal Attributes Questionnaire (PAQ) are the most comparable (Herron, Goodman, & Herron, 1983) and the most widely used in research (Locksley & Colton, 1979). Now recognized as a standard in the field, the BSRI was the first of these instruments. According to Rowland (1980), "Androgyny really emerged in the psychological literature with Bem's (1974) publication of the BSRI and so has essentially been defined operationally from that scale" (p. 449).

Bem's (1974) original conception of androgyny was grounded in a balance model. Persons indicating no statistically significant difference in the number of masculine and feminine items they endorsed were considered to be androgynous, regardless of the number of items they selected. In her 1977 revision, the author reserves the term "androgynous" for those affirming a large number of traits from both Masculinity and Femininity scales.

Masculinity and femininity are considered as separate rather than bipolar dimensions so that individuals may indicate the degree to which they identify with both (androgyny), one but not the other (masculinity or femininity), or neither (undifferentiated). The item pool was developed according to traditional sociocultural

definitions of sex-appropriate desirability rather than on the basis of differential endorsement by males and females (Bem, 1981a).

Self-Actualization.

There are currently six self-report measures designed to assess self-actualization: The Personal Orientation Inventory, Self-Actualization Inventory, Personal Orientation Dimensions, Dimensions of Self-Actualization, Caring Relationship Inventory, and Pair Attraction Inventory. Introduced by Shostrom in 1964, the Personal Orientation Inventory (POI) was the first of these instruments and remains the most prominent measure (Leak, 1984).

Shostrom developed the inventory in consultation with Maslow (Knapp, 1976) who later endorsed it as a means of operationalizing his definition of self-actualization (Maslow, 1971). Test items were drawn from the writings of several humanistic, existential, and gestalt theorists (Shostrom, 1974)¹ and also were based upon observed value judgments of clients seen by practitioners at the Institute of Therapeutic Psychology at Santa Anna, California, over a five-year period (Shostrom & Knapp, 1966).

The POI has been demonstrated as an effective instrument in differentiating among various groups as hypothesized (summarized in Hyman, 1979; Knapp, 1976; Murphy, Dewolfe, & Mozdzierz, 1984; Oakland, Freed, Lovekin, Davis, & Camilleri, 1978; Shostrom, 1974). Since the inventory

is generally stable across sex differences and does not consistently favor either gender when such differences do occur (Cristall & Dean, 1976; Hattie, 1979; King, 1974; Shostrom, 1974; Wise & David, 1975), one may assume that it reflects both instrumental and expressive orientations. Researchers have employed various procedures for determining self-actualization level from the inventory including consideration of all 12 to 14 scales,² combinations of the two major scales (Inner-Direction & Time Competence), and the Inner-Direction scale only.

Related Research

Studies Using Unspecified Actualization and Androgyny Measures.³

Heidemann (1977) found that persons holding non-traditional sex-role behavioral orientations scored significantly higher on a measure of self-actualization than did traditionally oriented subjects. Further, results suggested significant positive correlations between androgyny, self-actualization, and sex-role behavioral orientation.

In a study relating androgyny and self-actualization to sexual functioning in women, Radlove (1977) indicated partial support for her hypothesis that androgynous females would score as being more self-actualized than would sex-typed women. Findings suggested that androgynous subjects viewed their husbands' attitudes as more egalitarian, tended to have lower neuroticism scores, were more likely to be college-educated and employed, achieved orgasm more frequently, and considered sex-related behaviors as equally

appropriate for males and females.

In another all-female study, however, Harris (1977) noted consistent differences on measures of self-actualization and locus of control between Personal Attributes Questionnaire-identified androgynous and low-masculinity subjects but not between androgynous and high-masculinity groups. The researcher observed that such results were consistent with previous suggestions that the Female-Valued scale of the inventory had less predictive power than the Male-Valued scale.

POI Studies with Other Sex-Role Measures.

Gill (1976) found no difference in self-actualization scores among 184 college women grouped into high, moderate, and low femininity categories based on the California Psychological Inventory. Results suggested that the high-femininity group was composed of proportionately more freshmen than sophomores and upperclassmen.

In examining the effects of sex-role conventionality among 191 female introductory psychology students, Corbett (1974) found a positive correlation between liberal sex-role attitudes and the Inner-Direction scale of the POI. Subjects with liberal sex-role orientations were more likely to score in the masculine direction than were the traditional women. Liberal women also tended to be analytically oriented. Further, results suggested that, although no difference existed between the kind and strength of needs, liberal women were apt to express their needs more openly.

Weissman (1974) noted that an interaction between marital status and levels of discrepancy between perceptions of self and ideal self accounted for differences in self-actualization scores among her sample of 81 female doctoral students. In general, lower levels of feminine identity conflict were associated with higher levels of self-actualization. Although single women as a group reported more conflict than did married women, single women having low levels of conflict scored as being more self-actualized than did married women with either high or low levels.

In contrast, Hunt (1976) found that neither self-actualization nor role attitudes were related to congruence between self-perception and perception of ideal women. In a study of 97 female child care workers, the researcher noted that inner-direction, but not time competence, scores on the POI were related to subjects' attitudes toward women's roles and to reported self-perceptions.

Concerning attitudes toward women, Priest and Wilhelm (1974) observed that, regardless of gender, college students scoring higher on the POI seemed to have a profeminist bias. The more self-actualized subjects tended to prefer anti-male rather than anti-female sexist jokes in contrast to lower-scoring students, who selected humor directed against the opposite sex. The researchers suggested, "Perhaps the self-actualizing person tended to identify more with oppressed groups, and hence in some cases enjoyed

conflict more, particularly when it was directed against the dominant group" (p. 249).

Similarly, Doyle (1975b) noted that self-actualizing persons of both sexes were more likely to hold profeminist than antifeminist views. In this study, a sample of 75 men and 75 women completed both the POI and Kirkpatrick's Feminist-Antifeminist Belief Pattern Scale. Scores on the Kirkpatrick instrument correlated positively with Inner-Direction and several POI subscales. Only for the males, however, was there a relationship between profeminism and the Self-Acceptance subscale of the POI, a finding Doyle suggested as supporting the idea that "males who view women in a more positive, egalitarian sense are more likely to perceive themselves differently than males who view women in a relatively tradition-bound fashion" (p. 902).

Likewise, Hjelle and Butterfield (1974) noted that females espousing liberal attitudes toward women's rights and social roles scored significantly higher on both major POI scales and all but two of the subscales (Nature of Man and Synergy) than did those holding more traditional views. The sample was composed of two groups of college women, 20 identified as liberal and 20 identified as conservative on the basis of the Spence and Helmreich Attitudes Toward Women Scale.

Regarding flexibility in attitudes toward others, Wise (1978) observed that among his sample of 218 public school teachers, instructor self-actualization influenced

sex-role-related perception of students. In contrast to low scorers, self-actualizing teachers tended not to base their perceptions of pupils on sex-differentiating characteristics. No significant correlations were noted between the sex of teachers and the index of sex-role perception (the Sex-Role Stereotype Questionnaire).

POI and BSRI Studies.

In a project involving the BSRI and POI as well as the Inventory of Feminine Values, Erb (1978) found that women who described themselves as having nontraditional sex-role values scored as being more self-actualized on all POI scales as well as on an overall measure than did females who indicated traditional values. Further, results suggested that androgynous women scored as being significantly more self-actualized than did feminine-identified women; however, the POI did not discriminate between androgynous-identified women and masculine-identified women. The author suggested that this unexpected finding may have reflected limitations imposed through the continuing influence of sex-role stereotyping.

In another all-female sample, Potash (1978) found no positive correlation between androgyny and self-actualization and no negative correlation between androgyny and behavioral rigidity. The BSRI, POI, and Schaeie's 1960 Test of Behavioral Rigidity were administered to a group of 49 college students.

In a later study, Blacher (1979) noted positive

correlations between androgyny, self-actualization, and field independence. Investigating the variables in a sample of 74 women aged 17 to 43, she found that feminist women, whether lesbian or nonlesbian, scored significantly higher on all three measures than did nonfeminist women, regardless of sexual preference.

Using a sample of 49 subjects, Ott (1976) found significant correlations between androgyny, inner-direction, and sex-role attitudes; between sex-role attitudes and sex-role stereotypes; and between inner-direction and sex-role stereotypes.

Self-Actualization and Androgyny Comparisons Using the POI and BSRI.

There are two studies similar in scope and instrumentation to the present investigation of the relationship between androgyny and self-actualization. In the first, Ginn (1975) found no difference in POI scores among equal groups of BSRI-classified androgynous, masculine, and feminine subjects. The only exception among his sample of 75 undergraduate female psychology students was that masculine-identified persons scored significantly higher on Acceptance of Aggression, a POI subscale involving acceptance of anger and hostile feelings within one's self. Ginn concluded that his results tended not to support the validity of the BSRI as an androgyny measure.

Several elements in his approach, however, may suggest some possible reasons why his findings did not reach

significance. First is the potential problem of information loss. Apparently restricting his treatment of both androgyny and self-actualization to the status of discrete variables, Ginn trichotomized his sample into sex-role groups and then compared each group on each of the POI scales, including both poles of the two major scales as opposed to Shostrom's (1974) suggestion of using only the positive poles for statistical analyses. Further, employing a statistical comparison on each of the ten POI subscales would seem to be contraindicated by an examination of the number of items on each scale (9 to 32) and by the fact that all of the subscales overlap to some extent with each other as well as with both major scales. Potential information loss, then, may have been a problem involved in Ginn's treatment of either inventory.

Secondly, questions can be raised as to the quantitative rationale behind portions of his trichotomy based on BSRI scores. In Ginn's study, the masculine group was comprised of those subjects having t score ratios of -5.10 to +.46 and the androgynous group consisted of those having t score ratios of +.58 to +1.85. However, until Bem revised the scoring procedures in 1977, androgyny was operationally defined by its proximity to a difference score of zero between the Masculinity and Femininity scale scores. According to Bem (1974), "the closer the Androgyny score is to zero, the more the person is androgynous" (p. 158). Individuals scoring at Ginn's lower limits on Masculinity

(+.46) would seem to be, at least according to Bem's definition, more androgynous than would those scoring at the upper limits (+.58) on Androgyny.

Contrary to his results, Cristall and Dean (1976) found small but significant differences in BSRI-measured androgyny between groups of adults designated as high in self-actualization and those designated as low in self-actualization. Based on their POI scores, a sample of 64 (32 male, 32 female) graduate students was divided at the median into equal groups of high and low scorers. Analysis revealed no significant difference between scores of males and females on either instrument. The researchers concluded that more self-actualized persons tend to be less bound by traditional sex-role stereotypes and suggested that "androgyny may expand the range of behavior for both sexes, permitting people to respond more effectively in diverse situations" (p. 842). However, the writers failed to specify which type of POI scores they employed--an overall measure based on one or both of the major scales or the entire inventory.

One may observe four major differences between their study and Ginn's (1975). Although age of subjects was not indicated in either article, one might assume that Cristall and Dean's (1976) sample of graduate students was an older group than Ginn's undergraduates. An increase in age may have contributed toward a greater variety of life experiences, a factor which potentially could have

affected performance on either inventory. For example, Knapp (1976) suggests that age has a definite bearing on POI scores since "the trend of increasing actualization up to the early or middle adult years seems fairly well established" (p. 86). Another major difference between the two studies is the matter of categorizing data. As noted, Ginn trichotomized his sample on the basis of BSRI scores and analyzed scores of each subject group on each individual POI scale including the polar dimensions on the two major scales. Cristall and Dean divided their sample according to scores above or below the median on the POI. Since Ginn's analysis included the examination of more discrete, thus smaller, groups of data, his approach would seem to be the more vulnerable to information loss.

An additional difference lies in the definition of androgyny itself. As already discussed, Ginn's (1975) division of his masculine and androgynous groups implies an apparent disregard of Bem's (1974) operational definition of androgyny as those scores nearest zero. However, since Cristall and Dean (1976) do note that an ideal androgyny score is zero (p. 842), one might assume that they did not likewise depart from the Bem definition. Finally, since Cristall and Dean tested both males and females, their study would seem to be more representative of the population than would Ginn's which includes females only.

Hypotheses

No studies have been specifically designed to test

Bem's (1977) reformulated concept of androgyny against the more global perspective of self-actualization. The present investigation addressed this issue. The following hypotheses were tested:

1. Androgyny and self-actualization are positively correlated.
2. Self-actualization scores of androgynous subjects will be higher than those of masculine/feminine-identified subjects.
3. Self-actualization scores of masculine/feminine-identified subjects will be higher than those of subjects classified as undifferentiated.
4. Scores on the measure of self-actualization will not differ on the basis of biological sex.

CHAPTER 3

Methodology

The central focus of this study was upon the presumed relationship between androgyny and self-actualization. It was hypothesized that the concepts are positively correlated, that androgynous persons would score higher on a measure of self-actualization than traditionally oriented persons, that undifferentiated persons would score as being the least self-actualized, and that self-actualization scores would not differ on the basis of biological gender.

Subjects

Subjects were 50 male and 50 female Austin Peay State University undergraduates between 25 and 40 years old who volunteered to participate in the study. This age range conforms to Knapp's (1976) observation of a relatively well established age-related trend toward increasing self-actualization during this period. Mean age was 30.17 years ($SD=4.19$) for the total sample, 29.76 years ($SD=4.22$) for men, and 30.58 years ($SD=4.11$) for women.

Instruments

The androgyny measure was the Bem Sex-Role Inventory (Bem, 1974). Self-actualization was measured through the Personal Orientation Inventory (Shostrom, 1964).

The Bem Sex-Role Inventory (BSRI) contains 20

stereotypically masculine personality characteristics, 20 stereotypically feminine traits, and 20 neutral filler items. Subjects rate each item on a 7-point scale according to the degree to which it is self-descriptive. The Masculinity and Femininity scales, each purported to measure culturally desirable gender-appropriate traits, are both logically and empirically independent. According to normative data, both sexes earn significantly higher gender-appropriate scores than cross-gender scores. Reported test-retest reliability correlations range from .76 to .94 (Bem, 1981a).

The Personal Orientation Inventory (POI) is a self-report instrument composed of 150 paired items about one's values, attitudes, and behaviors. Subjects respond to each pair by indicating which alternative is true or mostly true for them. Time Competence and Inner-Direction, the two major scales, are statistically independent of each other and together incorporate all 150 items. The Time Competence scale is intended to assess here-and-now orientation as opposed to preoccupation with either past or potential future concerns. Inner-Direction is designed as a measure of one's internal gyro, the degree to which one is self-directed rather than other-directed. Reported test-retest reliability coefficients are .71 for Time Competence and .77 for Inner-Direction (Shostrom, 1974).

Procedure: Administration and Scoring

All subjects completed the POI and the BSRI in that order after signing an informed consent statement (see Appendix) concerning their willingness to participate. Tests were administered in one of three settings: classroom, small group, and individual.

Only the two major POI scales, Time Competence and Inner-Direction, were scored. As already noted, these scales incorporate all of the test items and, unlike the 10 subscales, are statistically independent. Additionally, they provide the best overall measure of self-actualization from the POI (Damm, 1969, 1972; Knapp, 1976; Shostrom, 1974). The procedure for determining this overall score involves subtracting the Time Competence raw score from the Inner-Direction raw score. Damm (1969, 1972) notes no significant advantage for conversion to standard scores. This computation of an overall self-actualization score (ID-TC) was used in testing all four hypotheses. Additionally, raw scores from the Inner-Direction and Time Competence scales were included as component scores in assessing the first and fourth hypotheses.

BSRI scores were used in several ways. Androgyny was treated as a continuous variable through the computation of a geometric mean for each subject. According to Bryan, Coleman, and Ganong (1981), the procedure involves figuring the square root of the product of an individual's Masculinity and Femininity scale scores and avoids unnecessary loss of information. Along with androgyny scores expressed

as geometric means (\sqrt{MF}), raw scores from the Masculinity and Femininity scales were included as component scores in assessing the first and fourth hypotheses.

In order to test the second and third hypotheses, BSRI scores also were used to trichotomize the sample into androgynous, masculine/feminine, and undifferentiated groups. This procedure involves a slight modification of Bem's (1981a) median split method, which classifies subjects into four categories. Instead, all high-low pattern scorers were considered as a single group to indicate traditional sex-role identification rather than being divided into separate masculine and feminine categories.⁴ This modification was in keeping with the assumption that self-actualization is not a gender-related concept and was intended to avoid unnecessary information loss.

CHAPTER 4

Results

Results from a multiple-regression analysis⁵ indicated that masculinity, femininity, age, and sex accounted for only 6.6% of the variation in self-actualization scores. Pearson product moment correlations, reported in Table 1, revealed few significant relationships between self-actualization and androgyny or their component scores. Further, two of these correlations were not in the hypothesized positive direction.

No significant relationships were noted for the sample as a whole or for the male subjects as a group. Among the women, however, results suggest that femininity is correlated negatively with both time competence and inner-direction, the two component variables for self-actualization in this study.

Although only two of these correlations reached significance, femininity in women appeared to be negatively related to self-actualization, time competence, and inner-direction across all age groups. Among men, the correlations were likewise low and almost as consistently negative regarding femininity and the three actualization measures. In general, however, correlations between actualization scores and masculinity for both sexes tended to be small but positive for the sample as a whole and for the 25- to 29-year-old group (N=54).

Table 1

Correlations for Androgyny and Self-Actualization Within Age and Gender Groups

Variable	25-40 ^a				25-29 ^b				30-40 ^c			
	SA	TC	ID	df	SA	TC	ID	df	SA	TC	ID	df
AND	.02	.01	.02	98	.13	.06	.13	52	-.17	-.04	-.16	44
M	.09	.08	.10	48	.35*	.15	.36*	30	-.46	.00	-.40	16
W	-.07	-.09	-.08	48	-.26	-.12	-.25	20	.12	-.08	.09	26
MASC	.09	.02	.08	98	.14	.14	.16	52	.02	-.14	-.03	44
M	.17	.04	.16	48	.39*	.20	.40*	30	-.33	-.34	-.40	16
W	.09	.09	.10	48	-.04	.11	.00	20	.21	.05	.20	26
FEM	-.11	-.07	-.11	98	.02	-.14	-.03	52	-.27	.01	-.24	44
M	-.11	.01	-.10	48	.07	-.07	.05	30	-.39	.15	-.29	16
W	-.22	-.22*	-.28*	48	-.38	-.33	-.41	20	-.09	-.25	-.15	26

Note. AND=androgyny. M=men. W=women. MASC=masculinity. FEM=femininity. SA=self-actualization.

TC=time competence. ID=inner-direction.

^aN=100 (50 men, 50 women). ^bN=54 (32 men, 22 women). ^cN=46 (18 men, 28 women).

* $p < .05$.

In this group, self-actualization and androgyny were significantly related but only for males. For the 32 men in this age range, masculinity was associated with both self-actualization and inner-direction but not with time competence. Likewise, androgyny correlated with inner-direction but not with time competence.

Although there were no other significant correlations, an inspection of the data from Table 1 seems to suggest a trend toward weak negative relationships between actualization scores and androgyny for females except in the 30- to 40-year-old group. Among males in this age range and for the group as a whole ($N=46$), however, an apparent mirror reversal occurred, producing small negative correlations only in this portion of the sample. One of these, the relationship of self-actualization to androgyny, did approach significance ($p=.055$) for males.

Using a modification of Bem's (1981a) median split method, 26 (13 men, 13 women) subjects were classified as androgynous, 51 (25 men, 26 women) as sex-typed, and 23 (12 men, 13 women) as undifferentiated. Mean ages for the three groups were 29.9 years for androgynous, 30.2 years for sex-typed, and 30.4 years for undifferentiated. Table 2 provides a comparison of assignments to sex-role group by gender for subjects included in this analysis with those from Bem's (1981, p. 9) normative sample:

Table 2

Sex-Role Assignment by Gender

Group	Women		Men	
	Bem	Study	Bem	Study
Feminine	39%	44%	12%	8%
Masculine	12%	8%	42%	42%
Androgynous	30%	26%	20%	26%
Undifferentiated	18%	22%	27%	24%

Contrary to prediction, androgynous subjects did not have higher POI scores than did sex-typed subjects, nor were scores of sex-typed subjects higher than those of undifferentiated subjects. Results of a one-way analysis of variance reported in Table 3 indicated no significant differences for the overall measure of self-actualization or for the time competence and inner-direction components across any of the age ranges examined. An additional ANOVA revealed no significant age differences across sex-role groups for the sample as a whole or within either of the two component age ranges.

As hypothesized, self-actualization scores did not differ on the basis of biological gender. As suggested by results of a one-way analysis of variance reported in Table 4, no significant sex differences were found in overall self-actualization scores or in time competence and inner-direction for the sample as a whole or for

Table 3

Differences in Self-Actualization Within Sex-Role and Age Groups

Variable/Group	AND ^a		ST ^b		UND ^c		F	df
	\bar{x}	SD	\bar{x}	SD	\bar{x}	SD		
SA								
25-40	65.96	8.94	67.94	8.52	67.09	9.10	.437	2,97
25-29	66.81	9.23	68.07	8.26	64.33	9.35	.702	2,51
30-40	64.60	8.00	67.80	8.62	70.09	7.79	1.082	2,43
TC								
25-40	16.12	3.41	16.57	2.72	16.30	3.11	.202	2,97
25-29	16.00	3.28	16.19	2.50	15.42	3.38	.269	2,51
30-40	16.30	3.61	16.96	2.88	17.27	2.45	.278	2,43
ID								
25-40	82.08	10.36	84.51	9.55	83.39	10.45	.504	2,97
25-29	82.81	10.71	84.27	9.34	79.75	10.82	.777	2,51
30-40	80.90	9.65	84.76	9.75	87.36	8.39	1.166	2,43

Note. AND=androgynous. ST=sex-typed. UND=undifferentiated. SA=self-actualization. TC=time competence. ID=inner-direction.

^aN=26 for 25-40, 16 for 25-29, 10 for 30-40. ^bN=51 for 25-40, 26 for 25-29, 25 for 30-40.

^cN=23 for 25-40, 12 for 25-29, 11 for 30-40.

Table 4

Gender Differences in Self-Actualization Within Age Groups

Variable/Group	M		W		F	df
	\bar{x}	SD	\bar{x}	SD		
SA						
25-40 ^a	66.32	10.11	68.14	6.98	1.075	1,98
25-29 ^b	64.94	9.90	69.68	6.28	3.811	1,52
30-40 ^c	68.78	10.02	66.93	7.27	.502	1,44
TC						
25-40	16.16	3.46	16.62	2.47	.576	1,98
25-29	15.88	3.26	16.09	2.49	.067	1,52
30-40	16.67	3.73	17.04	2.37	.161	1,44
ID						
25-40	82.48	11.54	84.76	8.07	1.284	1,98
25-29	80.81	11.20	85.77	7.79	3.116	1,52
30-40	85.44	11.54	83.96	8.20	.247	1,44

Note. M=men. W=women. SA=self-actualization. TC=time competence. ID=inner-direction.

^aN=100 (50 men, 50 women). ^bN=54 (32 men, 22 women). ^cN=46 (18 men, 28 women).

the two component age groups. Among 25- to 29-year-olds, however, the probabilities for such differences in self-actualization ($p=.053$) and inner-direction ($p=.08$) did approach significance.

As suggested by the Pearson product moment correlations noted in Table 5, age was significantly related to time competence for the sample as a whole and for female subjects as a group. For 30- to 40-year-olds as a group and for male subjects within that range, time competence and age were also significantly correlated.

Table 5

Correlations for Age with Self-Actualization and Androgyny

Group	SA			AND			df
	OS	TC	ID	OS	MASC	FEM	
25-40 ^a	.04	.28**	.12	-.08	-.14	.02	98
M	.16	.27	.22	-.11	-.19	.02	48
W	-.16	.29*	-.05	-.02	.01	-.05	48
25-29 ^b	-.00	.26	.07	.06	.07	.02	52
M	-.02	.21	.05	.08	.01	.18	30
W	.11	.38	.21	-.02	.08	-.12	20
30-40 ^c	.01	.32*	.10	-.04	-.02	-.03	44
M	.01	.48*	.16	.17	-.07	.22	16
W	-.03	.19	.03	-.18	-.12	-.10	26

Note. OS=overall score. SA=self-actualization. TC=time competence. ID=inner-direction.

AND=androgyny. MASC=masculinity. FEM=femininity. M=men. W=women.

^aN=100 (50 men, 50 women). ^bN=54 (32 men, 22 women). ^cN=46 (18 men, 28 women).

* $p < .05$. ** $p < .005$.

CHAPTER 5

Discussion

Underlying this research was the contention that androgyny is one aspect of the more global concept of self-actualization, a point noted earlier by Lubinski, Tellegen, and Butcher (1981). Although the two concepts may indeed be related in theory, results suggest that this relationship does not extend to the empirical. It was hypothesized (a) that androgyny and self-actualization are positively correlated, (b) that self-actualization scores of androgynous subjects would be higher than those of sex-typed subjects, (c) that self-actualization scores of sex-typed subjects would be higher than those of undifferentiated subjects, and (d) that self-actualization scores would not differ in relation to biological gender. Results of this investigation offered full support for the final hypothesis, limited evidence for the first, and no basis for the second and third.

Self-actualization and androgyny were positively correlated only for males between 25 and 29 years old, a group amounting to about one third of the total sample tested. For these individuals, masculinity was associated with both self-actualization and its inner-direction component; inner-direction likewise correlated with androgyny. No correlations were noted for time competence

in this group. Findings suggest that men in this age range who describe themselves in culturally appropriate masculine terms tend to rely on themselves rather than on others for support and to be more focused on the past or future than on the present.

Since androgyny and self-actualization do seem to be grounded in similar theory, the lack of statistical association might have arisen in part from the different cognitive tasks the measurement instruments demanded of respondents. For the POI, subjects chose the more self-descriptive alternative from each item pair. The BSRI required one to quantify a series of adjectives according to their appropriateness for him or her.

A more likely explanation for the lack of more significant correlations could be the inadequacy of the measurement procedure employed. For example, using geometric means for the androgyny variable and including the raw scores from the Masculinity and Femininity scales may have masked the salience of androgyny's conceptual nature. Perhaps more in keeping with Bem's (1981a) notion of androgyny as an integrative quality would have been an analysis based on Bobko and Schwartz's (1984) integration metric. This technique computes androgyny as the absolute value of the difference between masculinity and femininity scores weighted by the average of the two scales.

Further, results suggesting that femininity in females is negatively correlated with both time competence and

inner-direction but not with self-actualization seems to imply that something might have been lacking in the computation of the overall actualization score, as advocated by Damm (1969, 1972) and used in this study. If both components of self-actualization are negatively correlated for women, then one might assume that self-actualization should be negatively correlated also. Again, computation of the overall score by Damm's subtractive procedure may have disguised the interaction of self-actualization's two major components. Perhaps a variation based on Bobko and Schwartz's (1984) general formula for an integrative metric would have been more appropriately used.

Results indicating a negative relationship between femininity and the two self-actualization components seem to suggest that the females as a group may have tended to be more traditional than profeminist in their role attitudes. Several researchers (Doyle, 1975b; Hjelle & Butterfield, 1974; Priest & Wilhelm, 1974) have found significant associations between profeminism and POI self-actualization scores.

Another possible explanation lies with the composition of the sample itself. Although no mean sex differences were noted for age, self-actualization, time competence, inner-direction, or androgyny for the sample as a whole or within either component age group, test subjects were neither randomly drawn from the university population nor chosen from a truly defined segment of that population

since age and sex were the only selection criteria. A more controlled approach would have been to match for age and education level on a subject-by-subject basis to form the two gender groups.

Regarding the presumed self-actualization score differences among sex-role groups, discrepancies in classifying subjects may have had an impact on the results of this investigation. The sample was trichotomized through a median split according to Bem's (1981a) cut-off figures of 4.90 for the Femininity scale and 4.95 for the Masculinity scale rather than on the basis of the sample's own medians of 4.95 for both scales. Although the procedural difference may appear negligible, Bobko and Schwartz (1984) note that since "a large proportion of subjects in a univariate distribution tend to cluster around the median . . . a slight shift in the estimation of the medians may have a substantial but unwanted effect on the categorization process" (p. 12).

Further, although not considered in this analysis, education level may have influenced the composition of the sex-role groups as well. For instance, Gill (1976) found that the high-femininity group in his sample was composed of proportionately more freshmen than sophomores and upperclassmen. Martin and Light (1984) noted a significant interaction between years of college completed and BSRI-classified sex-role orientation. Using a sample of 358 subjects (freshmen through graduate students),

they found that as education level increased "the percentage of students classified as masculine increased and the percentage classified as feminine decreased" (p. 316).

Although males and females were distributed approximately equally within the three sex-role groups for this study, education level could have had some noncontrolled-for bearing on the Masculinity and Femininity scale scores themselves. Since the BSRI is a list of adjectives to be rated on a 7-point scale according to their appropriateness for self-description, scores are determined in large part by how "loudly" respondents are willing to describe themselves. If, as Martin and Light (1984) imply, education level interacts with Masculinity and Femininity scale scores, differences in number of college years completed could have been a source of error.

Results indicating that the POI did not discriminate on the basis of gender tend to support this writer's contention that self-actualization is not a sex-related quality. Findings are in agreement with those of Cristall and Dean (1976), Hattie (1979), King (1974), Shostrom (1974), and Wise and Davis (1975) on the stability of the instrument across sex differences.

Time competence, but not inner-direction or overall self-actualization scores, correlated positively with age for the sample as a whole, for females as a group, for 30- to 40-year-old subjects, and for males within that age range. Results suggest that as these individuals mature, they become more attuned to the here-and-now

and dwell less on past and future concerns. This finding tends to support, at least partially, Knapp's (1976) observation of a relatively well established trend toward increasing levels of self-actualization through the early and middle adult years.

The nonsignificant results for an age-related association of overall self-actualization level may quite possibly have been a result of the computation technique used to determine the overall score. Since this procedure involved the subtraction of the Time Competence scale score from the Inner-Direction scale score, the rise in time competence level by subject age could have masked an age-related trend for self-actualization. No explanation could be found for the correlations' being confined to the specified segments of the sample and not extended to other segments or for the lack of a significant association between age and inner-direction.

In summary, results of this research suggest the following: that androgyny and self-actualization are positively correlated among 25- to 29-year-old males, that self-actualization is associated with masculinity but not with femininity, that sex-role orientation is not a factor in self-actualization level, that self-actualization is not gender-related, and that time competence is positively associated with age. In view of the methodological flaws discussed for this investigation, it is recommended that future researchers use integration

metrics to compute overall POI and BSRI scores and attempt more controlled sampling techniques.

Footnotes

¹These writers include Maslow, Riesman, May, Angel, Ellenberger, Perls, Hefferline, and Goodman.

²The POI contains two major scales and 10 subscales. The major scales are bipolar in character. Shostrom (1974) indicates that the inventory has 14 scales but suggests that statistical analyses of the major scales be confined to the positive poles.

³All three studies in this section were found in Dissertation Abstracts International. Of these, Harris (1977) was the only researcher to specify the androgyny instrument employed. None of the three abstracts included the name of the self-actualization measure used.

⁴Subjects were classified according to Bem's (1981a) cut-off figures of 4.90 for the Femininity scale and 4.95 for the Masculinity scale rather than according to the sample's own medians of 4.95 for both scales.

⁵All statistical procedures were performed using Blair's (1985) SPEED software package.

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APPENDIX

APPENDIX

Informed Consent Statement

The purpose of this investigation is a graduate research project about the relationship between two variables. Your participation will be limited to the completion of two paper-and-pencil inventories. All responses are confidential. Only group data, not individual scores, will be used in the final paper. Demographic information on the test forms will be used for analysis only. You will not be identified in the study, nor will anyone other than the researcher have access to your responses.

You may expect no potential risks or benefits because of your participation. Your participation is completely voluntary, and you may withdraw your participation at any time without penalty.

Should you have questions about the project, you may contact Tommie Lackman through the Psychology Department at the completion of the study. A copy of the final paper will be on file at the university library should you desire to read it.

Thank you for your cooperation.

I agree to participate in the present study being conducted under the supervision of a faculty member of the Department of Psychology at Austin Peay State University. I have been informed, either orally or in writing or both, about the procedures to be followed and about any discomforts or risks which may be involved. The investigator has offered to answer any further inquiries as I may have regarding the procedures. I understand that I am free to terminate my participation at any time without penalty or prejudice and to have all data obtained from me withdrawn from the study and destroyed. I have also been told of any benefits that may result from my participation.

Name (Please print)

Date