Creative Self-Concept, Masculinity, Femininity and Three Models of Androgyny

Sep 79

PDF01/PC02 Plus Postage.

Androgyny; Creative Development; Creativity Research; Personality Traits; Psychological Patterns; Self Concept; Sex Differences; Sex Role; Social Influences

ABSTRACT

Relationships between aspects of creativity and psychological masculinity and femininity are examined from the perspectives of balance, additive, and catalytic models of androgyny. Female (N=85) and male (N=105) subjects completed Gough's Adjective Check List (ACL) in which the adjective, "creative," had been inserted. The ACL was scored for two sets of masculinity and femininity scales and for creative personality scales. Female subjects also completed the Bem Sex Role Inventory. Empirically derived indices of creative self-concept correlated positively with multiple indices of psychological masculinity and somewhat negatively with indices of psychological femininity. Multiple regression analyses detected significant positive linear interactions involving one set of masculinity and femininity indices and the women's creative self-concepts. Data suggest that potentially creative women may struggle against the very social conceptions about "gender-appropriate" behavior which men find supportive in their creative self-conceptions. Greater sex-role flexibility may make it easier for men and women to develop creative self-concepts.

(Author/NRB)
Creative Self-Concept, Masculinity, Femininity 
and Three Models of Androgyny

David M. Harrington
Stevenson College
University of California, Santa Cruz
Susan M. Andersen
Stanford University

Paper presented at a meeting of the American Psychological 
ABSTRACT

Empirically derived indices of creative self-concept correlated positively with multiple indices of psychological masculinity in a sample of 85 undergraduate women (average $r = +.52$) and 105 undergraduate men (average $r = +.55$) and somewhat negatively with indices of psychological femininity among the women (average $r = -.06$) and men (average $r = -.30$). Multiple regression analyses detected significant positive linear interactions involving one set of masculinity and femininity indices and the women's creative self-concepts. Results were discussed in terms of (a) balance, additive and catalytic models of androgyny, (b) the factorial complexity of masculinity and femininity indices and concepts and (c) implications for creativity in women.
Theory and evidence suggest that creative behavior sometimes involves the manifestation of both masculine and feminine personality characteristics — that is, characteristics which are either valued more highly by or for one sex than the other or characteristics which one sex seems to possess more strongly than the other in contemporary American society. If so, one would expect psychologically androgynous individuals (individuals who integrate masculine and feminine characteristics) to be, on the average, more creative than non-androgynous individuals. The study reported here was an attempt to test this hypothesis using multiple indices of creative self-concept, multiple indices of psychological masculinity and femininity and three importantly different conceptual models of psychological androgy ny.

By labeling certain characteristics "masculine" or "feminine" we are neither claiming that these characteristics should be valued by or for one sex more than the other nor that differential manifestations of the characteristics reflect innate sex-related differences. Instead, we are simply applying to the domain of creativity an essentially atheoretical system of categories and descriptive terms which have emerged from prior empirical studies and which previous investigators have found useful in organizing individual differences in other behavioral domains. By doing
this we hope to illuminate the creativity domain and further evaluate the heuristic value of these broad, atheoretical constructs and their associated measures.

In considering the possible relationship between creativity and androgyny, it seems to us there are basically three models of androgyny to consider: the original balance model (as proposed by Bem, 1974), the newer additive model (as proposed by Heilbrun, 1976 and Spence, Helmreich & Stapp, 1975, among others, and recently endorsed by Bem, 1977), and a barely articulated and rarely examined catalytic or multiplicative model. All three models of androgyny rest upon formulations of psychological masculinity and femininity as involving two roughly orthogonal dimensions (Bakan, 1966; Bem, 1974; Block, Note 3 and 1973; Carlson, 1971 and Constantinople, 1973) and related efforts to measure psychological masculinity and femininity by separate scales (Baucom & Sanders, 1978; Bem, 1974; Berzins, Welling & Wetter, 1978; Block, 1973; Brim, 1958; Heilbrun, 1976; Kanner, 1976 and Spence, Helmreich & Stapp, 1975).

The Balance Model of Androgyny

According to Bem’s original balance model, androgyny is a state or process in which an individual’s masculine and feminine tendencies are relatively evenly balanced. It seems plausible to us that some forms of creativity might be facilitated by a balance of certain masculine and feminine characteristics and would be distorted or inhibited by an imbalance. An architect, for example, whose concerns with technical and engineering
details (a putatively masculine characteristic) and aesthetic sensitivity (a putatively feminine characteristic) are seriously imbalanced might tend to produce architecture in which either the aesthetic or technical details would be sacrificed for the sake of the predominant concern. A more balanced or androgynous architect, on the other hand, would presumably tend to harmonize these two concerns and thereby produce more creative works. [For empirical evidence linking balance-model androgyny with personality and cognitive characteristics associated with creativity, see Harrington and Andersen (Note 7)].

The Additive Model of Androgyny

According to proponents of the newer, two-factor additive model of androgyny, the original balance model was seriously deficient in failing to distinguish between individuals who were balanced by having strong masculine and strong feminine characteristics from those who were balanced by having weak masculine and weak feminine characteristics. The additive model views as androgynous only those individuals who are relatively high in both masculine and feminine characteristics and views as "undifferentiated" or "unclassifiable" individuals who are relatively low on both dimensions. Because various forms of creativity have been positively linked to such classically masculine characteristics as autonomy, independence, and self-sufficiency in both men and women, to psychological femininity scales among men, and to such specific feminine characteristics as aesthetic interest and sensitivity in both men and women, one
Creativity and Androgyny

might expect additive-model androgynous individuals to be more creative than additive-model masculine individuals by virtue of the feminine characteristics associated with creativity, more creative than the feminine individuals by virtue of the masculine characteristics associated with creativity and more creative than the unclassified individuals by virtue of both sets of characteristics. In terms of the architect example, one would presumably prefer an architect with strong technical interests and skills and strong aesthetic interests and sensitivities to an architect weak in either or both respects. [See Harrington and Andersen (Note 7) for full references and for empirical evidence linking additive-model androgyny with personality, cognitive and child-rearing characteristics associated with creativity.]

The Catalytic Model of Androgyny

The fundamental notion involved in the third model of androgyny is that of catalytic interaction -- an explosively productive effect of mixing masculine and feminine characteristics. According to this catalytic, or multiplicative, model of androgyny, increments of psychological masculinity yield larger increments of creativity in the context of relatively high femininity than in the context of relatively low femininity and, reciprocally, increments of psychological femininity yield larger increments of creativity in the context of relatively high masculinity than in the context of relatively low masculinity. Again, consider the architect example. Increments
of aesthetic sensitivity may well yield greater increments of creativity in an architect who possesses strong technical skills (and who can therefore manifest the aesthetic sensitivity in technically more advanced and complex structures) than in an architect whose technical skills are relatively weak and who can therefore not take full advantage of the additional aesthetic sensitivity. [And, reciprocally, increments of technical proficiency may well yield greater increments of creativity in an aesthetically sensitive architect (who can use the technical proficiency in interesting ways) than in an aesthetically average architect.]

Our study was designed to examine relationships between aspects of creativity and psychological masculinity and femininity from the perspectives of these three models of psychological androgyny.

**Method**

**Subjects**

Ss were 85 UC Santa Cruz undergraduate women and 105 UC Berkeley undergraduate men.

**Procedures**

All Ss were administered a version of Gough's Adjective Check List (ACL) (Gough, 1952) in which the adjective "creative" had been inserted. The ACL was scored for two sets of masculinity and femininity scales derived from work by Heilbrun (1976) and Parker (1969). The Heilbrun scales contain adjectives which discriminated between college men identified with masculine...
Creativity and Androgyny

fathers and combines gender- and identification-based differences. The Parker scales contain adjectives which simply discriminated between self-descriptions of University of Texas freshmen and freshwomen in 1965.

The ACL was also scored for creative personality scales derived from studies of creativity in high school males and females (Smith & Schaefer, 1969), undergraduate men (Domino, 1970), technical and research personnel (Van Zelst & Kerr, 1954), male architects (MacKinnon, Note 9) and a composite scale consisting of adjectives which significantly differentiated creative from less creative individuals in at least two previous empirical studies (Harrington, Note 4 & 6 and 1975). Because we were dealing with undergraduates who had not yet had opportunity to establish themselves as creative adults and whose creative activities were scattered in a variety of domains, we turned to these indices of creative self-concept which have demonstrated concurrent and construct validity with respect to creative behavior in fairly broad domains. (All of the ACL-based scales were scored by a technique which effectively partialled out general tendency to check adjectives using simple linear regression methods).

The undergraduate women were also administered the Bem Sex Role Inventory (BSRI) (Bem, 1974) which was scored for both the original 20-item masculinity and femininity scales (the "long" scales) and the new, 10-item scales (the "short" scales). (Bem, Note 2).
Creativity and Androgyny

Results

A Note on Data-Analytic Strategies in this Field

We believe that data analytic strategies applied to psychological masculinity and femininity data in the past have often been less incisive and revealing than they might have been and we believe that historical factors may be to blame. The initial balance-model conception of androgyny quickly became linked to a data-analytic approach involving 1-way ANOVAs -- an analytic procedure quite appropriate given the balance-model conception. For reasons which we do not fully understand, however, the four-fold classification system (androgynous, masculine, feminine and unclassified) associated with the newer, additive model has most often been analyzed as a system of four dimensionless categories by means of 1-way ANOVAs (e.g., Bem, 1977; Berzins et al., 1978; Kelly & Worell, 1976; Spence & Helmreich, 1978) despite the fact that the classifications clearly rest upon two essentially independent dimensions. [These two-by-two classifications have occasionally been analyzed using dimension-respecting 2-way ANOVA's which are capable of laying bare the separate effects of masculinity and femininity as well as their interactive effects (e.g., Baucom & Sanders, 1978 and Heilbrun, 1976). Even 2-way ANOVAs applied to these data, however, necessarily throw away information and inappropriately highlight differences near the somewhat arbitrary points in the distributions used to classify individuals (Cohen & Cohen, 1975, pp. 299-301; Harrington, Note 5)].
In order to evaluate the applicability of the catalytic model of androgyne to creativity as sensitively as possible, we analyzed our data using a combination of simple correlational analyses and hierarchical multiple regression analyses in which linear interaction effects were carried by simple product terms (Cohen, 1978).

Correlations between Creative Self-Concept and Masculinity and Femininity

As seen in Table 1, indices of creative self-concept were positively and significantly related to masculinity indices among both men and women. The average $r$ between masculinity indices and creative self-concept scales was $+.52$ among the women and $+.55$ among the men.

Indices of creative self-concept and psychological femininity were slightly negatively related among the women (average $r = -.06$) and moderately negatively related among the men (average $r = -.30$).

Because our review of the literature had led us to expect generally positive correlations between femininity scales and creative self-concept, we examined the relationship between the Composite Creative Self-Concept scale and the individual items and adjectives comprising the femininity scales to see if, as expected, some of the feminine adjectives and items were positively associated with creative self-concept. Of the 93 adjectives in the Parker femininity scale, eleven (11.8%)
correlated significantly positively with the Composite Creative Self-Concept scale in the full sample of 190 Ss: artistic, complicated, friendly, enthusiastic, headstrong, idealistic, impulsive, natural, optimistic, outgoing and spontaneous. (The Parker Femininity scale as a whole correlated -.09 with the Composite Creative Self-Concept scale in the full sample). In sharp contrast, only one (4%) of the 25 Heilbrun femininity adjectives (friendly) and none of the BSRI femininity items correlated significantly positively with the composite scale. Because these femininity indices are primarily comprised of items which are negatively associated with creativity (e.g., conventional, cooperative, yielding, etc.), the full femininity scales correlate negatively with our creative self-concept scales. The implications regarding factorial and conceptual complexity of these masculinity and femininity scales which these figures hint at will be discussed below.

Evidence of Masculinity x Femininity Linear Interaction

As seen in Table 2, there was essentially no evidence of a linear interaction involving masculinity, femininity and creative self-concept among the men but some evidence of a linear interaction among the women -- particularly involving the Heilbrun masculinity and femininity scales which yielded significant positive linear interactions with four of the five creative self-concept scales among the women.
These significant positive linear interactions can be viewed from two equally legitimate perspectives. From one perspective, they indicate that rs between the creative self-concept indices and the Heilbrun femininity scale tended to be more positive when the Heilbrun masculinity scores were high than when the masculinity scores were low. From the other perspective, they indicate that the rs between the creative self-concept indices and the Heilbrun masculinity scale were more positive when the Heilbrun femininity scores were high than when the femininity scores were low. The symmetrical aspect of these interactions can be seen in the rs involving the ACL Composite Creative Self-Concept scale and the Heilbrun scales.

For one set of correlational analyses, the women were trichotomized with respect to their Heilbrun masculinity scores and for the other set were trichotomized with respect to their Heilbrun femininity scores. The rs between ACL Composite Creative Self-Concept and Heilbrun femininity among women with low, medium and high Heilbrun masculinity scores were -.24, .00 and +.26, respectively. Symmetrically, the rs between ACL Composite Creative Self-Concept and Heilbrun masculinity among women with low, medium and high Heilbrun femininity scores were +.50, +.54 and +.76, respectively. The pattern of correlations between Heilbrun femininity scores and the four ACL creative self-concept scales which yielded significant interactions are illustrated in Figure 1.
In order to examine standing on creative self-concept as a function of the four categories which have come to be conventional in this field, the women were classified on the basis of the BSRI long scales using the median values reported by Bem (1977) and in terms of the BSRI short scales based on splits in the short scale distributions which came as close as possible to yielding the same percentage divisions in our sample as were generated by Bem's 1977 median values for the BSRI long scales. Classifications of men and women in terms of the Parker and Heilbrun scales were made on the basis of median splits relative to our total sample of 190 Ss. In view of the serious misclassification problems reported by Kelly, Furman & Young (1978), it seemed wise to define androgyny using a variety of classificatory schemes. Four planned comparisons were computed for each creative self-concept index within each sex -- the contrasts of androgynous Ss versus each of the three other types by means of Dunnett's test (Winer, 1971) and the contrasts of androgynous Ss versus non-androgynous Ss by means of planned t-tests. We found that:

1. Androgynous Ss had stronger creative self-concepts than unclassified Ss in 96.7% of the comparisons (95% for the women and 100% for the men) and significantly stronger in 53.3% of the comparisons (55% for the women and 50% for the men).

2. Androgynous Ss had stronger creative self-concepts than feminine Ss in 96.7% of the comparisons (95% for the women and
Creativity and Androgyny

100% for the men) and significantly stronger in 60% of the comparisons (65% for the women and 50% for the men).

(3) Androgynous Ss had weaker creative self-concepts than masculine Ss in 66.7% of the comparisons (50% for the women and 100% for the men) and significantly weaker in 6.7% of the comparisons (0% for the women and 20% for the men). (However, androgynous women obtained non-significantly higher creative self-concept scores than masculine women in 80% of the contrasts when the women were classified in terms of their Heilbrun scales --the scales which had yielded consistent evidence of positive masculinity x femininity linear interaction in Table 2.)

(4) Androgynous Ss had stronger creative self-concepts than all non-androgynous Ss combined in 93.3% of the comparisons (90% for women and 100% for men) and significantly stronger in 40% of the comparisons (55% for women and 10% for men).

These results can be summarized in terms of the "masculinity advantage" which was shared by both the androgynous and masculine Ss. Primarily by virtue of their "masculinity advantage," the androgynous Ss had stronger creative self-concepts than the feminine or the unclassifiable Ss and, by virtue of their masculinity-based superiority to these two groups, had stronger creative self-concepts than all non-androgynous Ss combined. Due to the slight "femininity disadvantage," however, the androgynous Ss tended to have slightly weaker creative self-concepts than the masculine Ss (though this was somewhat offset by the positive masculinity x femininity linear interactions among the
women). Because masculine Ss tended to have slightly stronger creative self-concepts than androgynous Ss, of course, masculine Ss also had consistently stronger creative self-concepts than the combined non-masculine Ss. Therefore, while it is accurate to conclude that androgynous Ss had stronger creative self-concepts than non-androgynous Ss, it is even more true that masculine Ss had stronger creative self-concepts than non-masculine Ss. The large differences in creative self-concepts were between feminine and unclassified Ss on the one hand and androgynous and masculine Ss on the other.

Discussion

We believe our results have implications regarding (a) the applicability to creativity of the three models of androgyny outlined above, (b) properties of currently-used masculinity and femininity scales and constructs, and (c) the very different relationships between "gender-appropriate" expectations and self-concepts experienced by men and women striving to be creative in this society.

Evidence Regarding the Three Models

The balance model -- rejected as deficient. The fact that androgynous men and women had consistently stronger creative self-concepts than unclassified men and women again called attention to a fundamental danger inherent in the original balance-model view of androgyny in which the distinction between high-highs and low-lows is essentially blurred. Because our results suggested that application of the balance model of
Creativity and Androgyny

androgyny to creative self-concept data would seriously obscure these important differences, we rejected the balance model as inappropriate for our data.

The additive model — half right. Though androgynous Ss typically exhibited stronger creative self-concepts than non-androgynous Ss in our study, as our initial speculations regarding additive-model androgyny suggested they would, this was almost exclusively due to the masculinity-based advantage of the androgynous Ss relative to the feminine and unclassified Ss, and was not due to an overall femininity-based advantage relative to the masculine and unclassified Ss as we had expected. The additive model therefore fit our data with respect to only one of its two dimensions.

The catalytic model — sometimes slightly right. The catalytic model of androgyny vis-a-vis creativity received just enough support in our data (with the behavior of the Heilbrun scales among the women) to warrant further investigation though, again, the data revealed relationships slightly skewed from those we had expected. Because we had assumed that femininity indices would correlate somewhat positively with creativity indices overall, we had assumed that masculinity x femininity linear interactions would reflect, for example, small positive rs between creativity and femininity indices among Ss with low masculinity scores and positive rs of moderate size between creativity and femininity indices among Ss with high masculinity scores. Instead, we obtained somewhat negative overall rs
Creativity and Androgyny

between creativity and femininity indices and -- in those cases where we found significant masculinity x femininity linear interactions -- obtained small negative rs between creativity and femininity indices among Ss with low masculinity scores and only small positive rs between creativity and femininity indices among Ss with high masculinity scores. (Figure 1 depicts this pattern clearly.)

The catalytic model of androgyny relative to creativity strikes us as theoretically interesting and we believe the modest evidence of its applicability reported here [coupled with parallel evidence involving both the Heilbrun and Parker scales and the actual production of creative alternate uses by our male Ss upon demand (see Harrington & Andersen, Note 7)] justifies its further exploration by those studying creativity within a personality framework.

Factorial Complexity of Masculinity and Femininity Constructs and Indices

The fact that the femininity indices contained pro-creative elements in substantially varying proportions (0%, 0%, 4% and 11.8%) directed our attention to the factorial complexity within these scales which has been previously recognized and investigated (Berzins, et al., 1978; Gaudreau, 1977 and Kelly, Caudill; Hathorn & O'Brien, 1977). We see the differences involving pro-creative elements as the manifestation of a more general and serious problem. If psychological masculinity and femininity are factorially complex constructs (and given their
largely empirical rather than theoretical origins and definitions, they almost surely are complex) and if different indices reflect those factors in different proportions, empirical results may vary substantially from index to index depending upon the degrees to which the various indices reflect the several factors. Given the particular combination of masculinity and femininity factors indexed by the Heilbrun scales, for example, we obtained consistent evidence of a small catalytic interaction vis à vis creative self-concept among women, but given the particular combination of masculinity and femininity factors indexed by the Parker scales, we obtained essentially no evidence of such a catalytic interaction. We believe the factorial complexity of these constructs and indices deserves substantially more attention than it has received to date, that it almost certainly does require the making of conceptual distinctions and fractionations and may require operational fractionations of the sort introduced by Webster (1956) over twenty years ago and recently used by Suter & Domino (1975). While the global, multi-faceted constructs and indices of masculinity and femininity now in use may prove valuable for some purposes, we suspect that fractionated and more theoretically-grounded constructs and indices may be more useful and more incisive for many purposes.

"Gender-Appropriate" Characteristics and Creative Self-Concepts: Conflict for Women and Congruency for Men?

We believe the substantial positive correlations between indices of masculinity and creative self-concept among these men
and women have serious personal implications for women striving to be creative in this society and serious social implications for a society which wishes to foster the creative potential inherent in all of its members.

These correlations suggest that women striving to be creative in this society may experience considerable conflict between the masculine components of their creative self-concepts and pressures toward "gender-appropriate" characteristics and behaviors. (The significant positive correlations of the eleven Parker femininity scale adjectives with the Composite Creative Self-Concept scale suggest that potentially creative men may also experience conflicts between some facts of their self-concepts and "gender-appropriate" characteristics, though their conflicts would appear to be much weaker and less pervasive than those experienced by potentially creative women.) We also believe our results provide a useful framework in which to view results reported by Schaefer and Helson that creative women -- many of whose creative characteristics tend to be "gender-inappropriate" -- are strongly conflicted about their femininity in high school (Schaefer, 1970) and, as professional adults, are less self-accepting than less creative men (Barron, 1969, Table 7.5 and Helson, 1967).

In summary, our data and those of Schaefer and Helson suggest that potentially creative women may currently struggle against and suffer from the very social conceptions and traditions about what is and is not "gender-appropriate" behavior which men find
sustaining and supportive in their creative self-conceptions and endeavors. Obviously, current social trends permitting greater sex-role flexibility for both sexes may make it easier for men and, especially, women to develop creative self-concepts and to behave creatively.
Reference Notes

1. Andersen, Susan M. *Creativity and self-concept in college women.* Senior thesis in psychology, University of California, Santa Cruz, May, 1977.


5. Harrington, D. M. *Non-linear main effects and interactions: What ANOVA sees routinely, MRC should also see.* Unpublished manuscript, University of California, Santa Cruz, 1979.


9. MacKinnon, D. W. *Illustrative material for some reflections on the current status of personality assessment with special references to the assessment of creative persons*. A paper presented to the graduate students, Department of Psychology, University of Utah, Salt Lake City, 1966.
References


Creativity and Androgyny

Cohen, J. Partialled products are interactions; partialled powers are curve components. Psychological Bulletin, 1978, 85, 858-866.


Kanner, A. D. Femininity and masculinity: Their relationships to creativity in male architects and their independence from
Creativity and Androgyny


Spence, J. T., Helmreich, R. & Stapp, J. Ratings of self and peers on sex role attributes and their relation to self-esteem


Creativity and Androgyny

Footnotes

1 The assistance of Frank Barron at several stages of this research and Gabriele Horner, who undertook the initial analyses involving the Parker and Heilbrun scales (Horner, Note 8) is gratefully acknowledged. Data analyses were made possible by generous grants of computer time from the UCSC Computer Center. This study was partially supported by UCSC Research Committee Grant #503065.

2 Requests for reprints should be sent to David M. Harrington, Stevenson College, University of California, Santa Cruz, California, 95064.

3 Due to a clerical error, three adjectives ("sexy," "submissive" and "uninhibited") were omitted from the version of the ACL administered to the women. Because Heilbrun's full 26-adjective femininity scale and Parker's 94-adjective femininity scale both contain the adjective "submissive," we were actually working with very slightly (and presumably insignificantly) truncated versions of those scales in this study.

4 See Harrington and Andersen, Note 7, for evidence of significant positive masculinity x femininity linear interactions involving the actual production of creative alternate uses for common objects among men instructed to do so, however.

5 Though no main or interactive effects involving quadratic trends were theoretically expected, a series of MRAs to examine such effects were conducted for the sake of analytic thoroughness (Harrington, Note 5). Only one of 50 relevant statistical tests.
was significant in the case of the men and only six of 100 relevant statistical tests were significant in the case of the women, though four of the six again involved the Heilbrun scales and involved a slight tendency for the positive masculinity x self-concept relationship to weaken as masculinity increased, particularly in the context of relatively high femininity. (Significant negative Femininity x Masculinity quadratic terms were found vis-a-vis the Domino, Smith & Schaefer and Composite Creative Self-Concept scales and a significant negative Masculinity quadratic term was found vis-a-vis the IPAR Architect scale.) Given the unexpected nature of these findings and—except for the concentration of significant results in the Heilbrun relationships—their near-chance-level frequency of occurrence, these results should probably be simply noted, systematically examined in subsequent studies but left uninterpreted until the phenomenon they may reflect is more clearly established.
Table 1
Correlations Between Creative Self-Concept Scales and Indices of Psychological Masculinity and Femininity

<table>
<thead>
<tr>
<th>Masculinity Scales</th>
<th>Parker Scales</th>
<th>Heilbrun Scales</th>
<th>Bem Scales</th>
<th>Long</th>
<th>Short</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACL Scales</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domino</td>
<td>+.47</td>
<td>+.44</td>
<td>+.51</td>
<td>+.49</td>
<td>+.38</td>
</tr>
<tr>
<td>Smith &amp; Schaefer</td>
<td>+.52</td>
<td>+.53</td>
<td>+.54</td>
<td>+.57</td>
<td>+.43</td>
</tr>
<tr>
<td>IPAR Architect</td>
<td>+.64</td>
<td>+.72</td>
<td>+.70</td>
<td>+.53</td>
<td>+.42</td>
</tr>
<tr>
<td>Van Zelst &amp; Kerr</td>
<td>+.42</td>
<td>+.54</td>
<td>+.48</td>
<td>+.49</td>
<td>+.55</td>
</tr>
<tr>
<td>Composite</td>
<td>+.54</td>
<td>+.58</td>
<td>+.60</td>
<td>+.49</td>
<td>+.49</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Femininity Scales</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domino</td>
<td>-.37</td>
<td>-.02</td>
<td>-.46</td>
<td>-.26</td>
<td>-.30</td>
</tr>
<tr>
<td>Smith &amp; Schaefer</td>
<td>-.20</td>
<td>+.14</td>
<td>-.31</td>
<td>-.08</td>
<td>-.14</td>
</tr>
<tr>
<td>IPAR Architect</td>
<td>-.31</td>
<td>+.03</td>
<td>-.32</td>
<td>-.07</td>
<td>-.22</td>
</tr>
<tr>
<td>Van Zelst &amp; Kerr</td>
<td>-.09</td>
<td>+.05</td>
<td>-.18</td>
<td>-.12</td>
<td>-.15</td>
</tr>
<tr>
<td>Composite</td>
<td>-.34</td>
<td>+.05</td>
<td>-.42</td>
<td>-.13</td>
<td>-.22</td>
</tr>
</tbody>
</table>

1 N = 105.  2 N = 85.

a < .001.  b < .01.  c < .05.  d < .10.  (All tests 2-tailed.)
Creativity and Androgyny

Table 2
Semi-partial Correlations\(^1\) Between Creative Self-Concept Scales and Masculinity x Femininity Products (Which Carry Linear Interactions)

<table>
<thead>
<tr>
<th>ACL Scales</th>
<th>(\text{Parker Scales})</th>
<th>(\text{Heilbrun Scales})</th>
<th>(\text{Bem Scales Long})</th>
<th>(\text{Bem Scales Short})</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Men(^2)</td>
<td>Women(^3)</td>
<td>Men</td>
<td>Women</td>
</tr>
<tr>
<td>Domino</td>
<td>-.00</td>
<td>+.03</td>
<td>-.05</td>
<td>+.20(^c)</td>
</tr>
<tr>
<td>Smith &amp; Schaefer</td>
<td>+.03</td>
<td>-.07</td>
<td>-.03</td>
<td>+.22(^c)</td>
</tr>
<tr>
<td>IPAR Architect</td>
<td>+.08</td>
<td>+.06</td>
<td>+.09</td>
<td>+.16(^c)</td>
</tr>
<tr>
<td>Van Zelst &amp; Kerr</td>
<td>+.09</td>
<td>+.10</td>
<td>+.08</td>
<td>+.05</td>
</tr>
<tr>
<td>Composite</td>
<td>+.03</td>
<td>+.11</td>
<td>+.04</td>
<td>+.23(^b)</td>
</tr>
</tbody>
</table>

\(^1\) Square roots of the increments in \(R^2\) brought about by adding Masculinity x Femininity product terms as the third independent variables (after Masculinity and Femininity) in hierarchical MRAs. "+" indicates a positive linear interaction. "-" indicates a negative linear interaction.

\(^2\) \(N = 105\).  \(^3\) \(N = 85\).

\(a < .001\).  \(b < .01\).  \(c < .05\).  \(d < .10\).  (All tests 2-tailed.)