

BODY BUILD PERCEPTIONS IN MALE AND FEMALE COLLEGE STUDENTS

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The Somatotype Rating Scale (SRS) was administered to 35 male and 35 female college students. The SRS allowed participants to rate their own body build, their ideal body build, and the body build of the typical and ideal male and female. While there was close agreement between males and females on the measures, females exhibited more dissatisfaction with their body build and greater congruency between their self-concept and their same-sex stereotype than did males. Results were discussed as possibly revealing the emergence of a mesomorphic body build ideal in both sexes.

Keywords: body build perceptions, college students, gender, Somatotype Rating Scale.

Four decades ago, Sheldon (1940) developed an empirical means of classifying human body types (i.e., somatotypes). Following a factor analytic analysis, he found three major physique components emerged: (a) endomorphy (i.e., the soft, round, obese body type), (b) mesomorphy (i.e., the athletic body type where bone and muscles are predominant), and (c) ectomorphy (i.e., the lightly muscled and slender body type). A numerical system was devised where a number from 1 to 7 was assigned for each of the physique components. Most individuals did not fit neatly into any single body type but rather had some degree of each of these three physique components. Sheldon also found an empirical link between somatotypes with a predominance of endomorphy, or mesomorphy, or ectomorphy and various temperament characteristics.

A number of years later, investigators began to study the personality characteristics that individuals assign to various physiques. Brodsky (1954), for example, found that college students agree that the endomorph is driven by pleasure, selfish, a poor friend, and a poor employee, whereas the mesomorph is self-confident, aggressive, mentally healthy, a good friend, and a good worker. Ectomorphs were described as mentally unstable and socially insecure. Researchers have found similar physique stereotypes in parents and teachers (Walker, 1963), school-age boys (Staffieri, 1957), school-age girls (Caskey & Felker, 1971), and even among preschoolers (Staffieri, 1957). These studies point to the same basic conclusion: endomorphy is viewed very unfavorably, mesomorphy very favorably, and ectomorphy somewhere in between.

It appears firmly established that physique stereotypes operate in American society. Yet one sparsely explored area of research is how individuals perceive their own body builds and how such perceptions relate to physique stereotypes. In the present study we assessed male and female college students' acceptance of their body builds and determined the congruency of self-perceptions of body build with same-

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and opposite-sex body build stereotypes. Participants were asked to complete an experimental Somatotype Rating Scale which allowed them to describe their own body type, their ideal body type, the typical male and typical female body build, and the ideal male and ideal female body build. Within-person and between-sex comparisons on these perceptions served to determine: (a) students' self-acceptance of their own body build, (b) the congruency between the self-concept of body build and same-and opposite-sex body build stereotypes, and (c) the degree of intersex agreement in self-concepts and body build stereotypes.

METHOD

PARTICIPANTS AND PROCEDURE

Thirty-five male and 35 female introductory psychology students were administered the Somatotype Rating Scale (SRS), which allowed participants to rate his/her body build (self subscale), his or her wished-for body build (ideal self subscale), the typical male student body build (typical male subscale), the typical female student body build (typical female subscale), the ideal male body build (ideal male subscale), and the ideal female body build (ideal female subscale). Stimulus persons were rated on Sheldon's three physique components of endomorphy, mesomorphy, and ectomorphy. Each physique component was rated along a 7-point scale, anchored with 1 = *very little* and 7 = *very much*.

RESULTS

The body build ratings were analyzed via a 2 (sex of participant) x 3 (somatotype components) x 6 (stimulus person) analysis of variance with repeated measures on the last two factors. The analysis revealed significant main effects for somatotype components ($F = 354.02, p < 0.01$), stimulus person ($F = 19.26, p < 0.01$), sex of participant x stimulus person interaction ($F = 23.42, p < 0.01$), somatotype components x stimulus person interaction ($F = 26.05, p < 0.01$), and the sex of participant x somatotype components x stimulus person interaction ($F = 4.07, p < 0.01$).

SELF-ACCEPTANCE OF BODY

The self profiles for the males and females (with the first number being the endomorphic component, the second number the mesomorphic component and the last number the ectomorphic component) were: males 2.14—5.14—3.86 and females 2.46—4.31—3.69. Surprisingly, the male and female self-views differed only in that males reported slightly more mesomorphy in their body builds than did females. Males and females reported the same amount of endomorphy and ectomorphy in their body profiles.

In self-concept research, the congruency between one's self-concept and one's ideal self-concept has been used as an index of self-acceptance. The greater the correspondence between self and ideal self, the greater the self-acceptance. Sandler's analysis revealed that males were satisfied with the degree of endomorphy and ectomorphy in their somatotype but they desired more mesomorphy (self $X = 5.14$, ideal self $X = 6.40$; $A = 0.04, p < 0.001$). Females, on the other hand, desired less endomorphy (self $X =$

2.46, ideal self $X = 1.14$; $A = 0.08$, $p < 0.001$), but desired more mesomorphy (self $X = 4.31$, ideal self $\sim = 5.77$; $A = 0.06$, $p < 0.01$) and desired more ectomorphy (self = 3.69, ideal self $X = 5.11$; $A = 0.14$, $p < 0.01$). Therefore, it appeared that males had greater acceptance of their body builds than did females.

SAME-SEX AND OPPOSITE-SEX STEREOTYPE CONGRUENCY

In a second analysis, male and female self profiles were compared to their typical male and typical female body build profiles. Males felt they exemplified the male body build stereotype (TM) on ectomorphy, but they perceived themselves as having less endomorphy (self $X = 2.14$, typical male $X = 3.26$; $A = 0.97$, $p < 0.001$) and more mesomorphy (self $X = 5.14$, typical male $X = 4.31$; $A = 0.09$, $p < 0.001$) than the typical college male. The females' self body build profile and their typical female body build profile were essentially the same, indicating a remarkable degree of same-sex stereotype congruency for females.

When compared to opposite sex stereotypes, males felt they had more mesomorphy than the typical female ($A = 0.05$, $p < 0.001$) and the females felt they had less mesomorphy than the typical male ($A = 0.11$, $p < 0.01$). Male and female self-ratings did not differ from the typical-person-of-the-opposite-sex profiles on the two remaining body components.

INTERSEX STEREOTYPE AGREEMENT

One interesting finding in the study was the high degree of between-sex agreement on the various stimulus person profiles. Both males and females gave essentially the same somatotype profiles for self, ideal self, typical male, typical female, ideal male, and ideal female. The two notable exceptions were that (a) males rated themselves higher in mesomorphy than females rated themselves ($t = 3.77$, $p < 0.001$), and (b) females rated the typical male as higher in mesomorphy than did the males ($t = 4.17$, $p < 0.001$). Both males and females tended to emphasize the mesomorphic component in their idealized conceptions.

DISCUSSION

Traditionally, researchers have demonstrated that women have lower scores on self-report measures than do men (MacBrayer, 1960; McKee & Sherriffs, 1959; Smith & Clifton, 1962). Moreover, such negative views of women are often shared by other females (Goldberg, 1973) and by males (Monahan et al., 1974). Bailey et al. (1975) has also shown that female self-concepts are more congruent with same-sex role stereotypes than are male self-concepts. Males tend to perceive themselves more favorably than they perceive other males, while females tend to see themselves as similar to other females.

The comparison of male and female self-concepts revealed that males and females perceived the same amount of ectomorphy in their body build, but males perceived themselves as having more mesomorphy, and less endomorphy than the females. While males desired more mesomorphy, females desired more mesomorphy, more ectomorphy, and less endomorphy. In addition, female self-concepts of their body build more closely matched their same-sex stereotype than did males. These findings support previous phenomenological research that found that women have lower self-acceptance and

greater congruency between their self-concept and their sex-role stereotype than do males. As in the Bailey et al. study, males in the present study tended to perceive themselves as possessing more of the desirable component (i.e., mesomorphy) than other males. On the other hand, females viewed the typical male college student as possessing more mesomorphy than did the males.

Today females of all ages, but particularly school-age, are being encouraged to participate in athletics. This may be the reason that both males and females emphasize the importance of mesomorphy in the ideal female as well as the ideal male body build. The fact that both sexes emphasized the importance of seeing university mesomorphy in their own and opposite-sex ideal may signal that a shared mesomorphic-ideal is emerging in the American society. Unlike Sheldon, however, who conceived of somatotypes as fixed and unchangeable, most Americans probably feel that a mesomorphic body build can be achieved via proper diet and exercise.

REFERENCES

- Bailey, R. C., Zinser, O., & Edgar, R. (1975). Perceived intelligence, motivation, and achievement in male and female college students. *Journal of Genetic Psychology*, 127, 125-129.
- Brodsky, C. M. (1954). A study of norms for body form-behavior relationships. Washington, DC: Catholic University of America Press.
- Caskey, S., & Felker, D. (1971). Social stereotyping of female body image by elementary school age girls. *Research Quarterly*, 42, 251-255.
- Goldberg, P. (1973). Are women prejudiced against women? In E. Aronson & R. Helmreich (Eds.), *Social psychology*. New York: Van Nostrand.
- MacBrayer, C. T. (1960). Differences in perception of the opposite sex by males and females. *Journal of Social Psychology*, 52, 309-314.
- McKee, J. P., & Sherriffs, A. C. (1959). Men's and women's beliefs, ideals, and self-concepts. *American Journal of Sociology*, 64, 356-363.
- Monahan, L., Kuhn, D., & Shaver, P. (1974). Intrapysic versus cultural explanations of the "fear of success" motive. *Journal of Personality and Social Psychology*, 29, 60-64.
- Sheldon, W. (1940). *The varieties of human physique: An introduction to constitutional psychology*. New York: Harper-Row.
- Smith, H. M., & Clifton, M. A. (1962). Sex differences in expressed self-concepts concerning the performance of selected motor skills. *Perceptual and Motor Skills*, 14, 71-73.
- Staffieri, J. (1957). A study of social stereotypes of body image in children. *Journal of Personality and Social Psychology*, 7, 1010-1014.
- Walker, R. N. (1963). Body build and behavior in young children: II. Body build and parents' ratings. *Child Development*, 34, 1-23.