

DOCUMENT RESUME

ED 137 654

CG 011 239

AUTHOR Duquin, Mary E.
 TITLE Three Cultural Perceptions of Sport.
 PUB DATE [75]
 NOTE 31p.; Paper presented at the Annual Convention of the American Psychological Association (84th, Washington, D.C., September 3-7, 1976)

EDRS PRICE MF-\$0.83 HC-\$2.06 Plus Postage.
 DESCRIPTORS *Androgyny; *Athletics; *College Students; *Physical Activities; *Physical Characteristics; Physical Development; Physical Education; *Sex (Characteristics); Sex Differences; Sex Role; *Womens Athletics

ABSTRACT

This article reports the level of androgynous development found in university students attracted to the sport experience. The Bem's Sex Role Inventory (BSRI) was administered to 45 female physical education majors 20 female varsity athletes, 35 male physical education majors and 45 male varsity athletes at the University of Pittsburgh. Percentages were calculated to determine what percentage of each sample scored masculine, androgynous and feminine on the BSRI. As hypothesized, the majority of males in both samples scored masculine while the largest percentage of females in both samples scored in the androgynous category. The author concluded that given the males' perception of sport as an agent of masculine orientation, sport tends to attract highly sex-typed males. However, the traditional perception of sport for females with its emphasis on process and product, tends to attract the more androgynous woman.
 (Author)

 * Documents acquired by ERIC include many informal unpublished *
 * materials not available from other sources. ERIC makes every effort *
 * to obtain the best copy available. Nevertheless, items of marginal *
 * reproducibility are often encountered and this affects the quality *
 * of the microfiche and hardcopy reproductions ERIC makes available *
 * via the ERIC Document Reproduction Service (EDRS). EDRS is not *
 * responsible for the quality of the original document. Reproductions *
 * supplied by EDRS are the best that can be made from the original. *

ED137654

THREE CULTURAL PERCEPTIONS OF SPORT

Mary E. Duquin

University of Pittsburgh

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

Introduction

Within the past decade, sport has undergone a variety of judicial analyses. Critics have explored the areas of sport ethics, economics, politics, racism and sexism (Edwards, 1973; Hoch, 1972). Currently, the most controversial and dramatic issue in sport is that of female equality in opportunity and involvement in the sport experience.

The history of sport is generally one of masculine domination (Van Dalen & Gennett, 1958). Such domination results from cultural patterns and perceptions which determine not only who participates in sport but how sport is conducted and experienced. However, male dominated sport is becoming an antiquated concept in many corners of the sport world. And today's emphasis on the growth and expansion of women's involvement in sport has important implications for how sport will be perceived and conducted in the future.

The more interesting areas of investigation involve questions concerning how sport involvement could affect women, how female involvement in sport could change society's perception of sport, and how society's perception of sport could influence the number of women attracted to the sport experience. These are some of the issues this paper wishes to address.

The paper will first explore the basic issues of how cultural perceptions and psychological motivations relate to the general perception

011 239

of sex roles and psychological well-being. Then three different cultural perceptions of sport, sport perceived and conducted as an agent of masculine orientation, sport perceived and conducted as an instrumental activity, suitable for both sexes and sport perceived and conducted as an androgynous activity, will be examined in greater detail.

Finally, the results of a study investigating the Androgynous orientation of male and female physical education majors and varsity athletes at the University of Pittsburgh will be reported and compared to the normative sample of students studied by Bem (1974) at Stanford University.

Socio-psychological perceptions of sex roles.

The socially distinct roles played by men and women lead societies to label certain behaviors and traits as masculine and certain others as feminine. This bipolar view of behavior has both historical and cross-cultural significance (Ortner, 1974). Generally, the traits needed to fulfill a given sex role are considered desirable for that sex (Bem, 1972). Thus, for example, in many cultures the child-rearing domestic female must be able to perform expressively. Expressive behavior is characterized by the capability to be understanding, sympathetic, affectionate, compassionate and tender. These traits, together with others such as sensitivity, warmth and shyness, combine to form a social image of femininity. Likewise, in many cultures the publicly oriented male must perform instrumentally, that is, be independent, assertive, ambitious, aggressive, and willing to take risks. Thus, a socially "masculine" or instrumental image is described in terms of leadership, dominance and competitive tendencies.

The fact that societies generally ascribe instrumental traits to males and expressive traits to females does not assure the validity or desirability of such ascriptions. Nevertheless, the subsequent belief that sex-typed socialization of individuals contributes to psychological well-being and healthy social adjustment has usually followed (Bem, 1972). In some societies such segregation of sex roles may function efficiently. However, the more complex the society is, that is, the greater number of roles which must be learned, the more dubious the efficiency of such a system, and the greater the likelihood of sex-typed role conflict.

The participation of women in sport has often been sighted as an example of this role conflict (Hart, 1974). Various writers have claimed that the role of the expressively-oriented female is in conflict with the role of the instrumentally-oriented athlete (Zobel, 1972). Some writers have even proposed that female participation in sport robs males of their right to sport as an agent of masculine orientation (Fisher, 1972; Werner, 1972). The implicit assumption here is that psychological health and social adjustment rests on the maintenance of instrumentality as a male preserve and expressivity a female preserve. Recent developments in social psychology, however, have stressed the need to reassess the definition of psychological well-being as it relates to the practice of sex-typing (Bem 1972; Broverman, Broverman, Clarkson, Rosenkrantz & Vogel, 1970; Maccoby, 1966). Research on highly sex-typed individuals has provided evidence which supports the belief that a high degree of sex role development is not conducive to behavioral flexibility and does not necessarily facilitate

general social or psychological well-being (Bem, 1974).

Studies on females have shown that high femininity is associated with poor adjustment, low social acceptance, and high anxiety (Consentino & Heilbrun, 1964; Gray, 1957; Webb, 1963). Research on high masculine adult males has shown them to have high anxiety, and neuroticism and low self-acceptance (Harford, 1967; Mussen, 1961; Mussen, 1962). Maccoby (1966) has summarized the research on the effect of sex-typing on intellectual development and has found that greater intellectual development seems to be associated with cross sex-typing. In describing cross sex-typing Bem (1972) states, "In girls, impulsiveness and aggressiveness are positive factors, whereas fearfulness and passivity are negative factors. In boys, the pattern of correlations is exactly the reverse" (p.6). Cross sex-typed individuals have been found to have higher creativity, higher spatial abilities and higher overall intelligence (Maccoby, 1966).

The benefits of cross sex-typing have important implications for interpreting the research regarding female participation in a culturally perceived cross sex-typed activity such as sport. High scores on the personality dimensions of autonomy and achievement orientation so often reported for female athletes provides evidence as to the ability of these women to be instrumentally oriented (Bird, 1972; Dayries, 1970; Neal, 1963). Further research suggests, however, that although female athletes see themselves as instrumental in sport situations, they see themselves as typically feminine (expressive) in social situations (Malumphy, 1968; Rector, 1971). Although some research has found female athletes to score below

the norm on some feminine traits, (Ibrahim, 1967) typical measures of masculinity and femininity tend to polarize male and female attributes, rendering impossible the recognition of individuals who perceive themselves as both instrumental and expressive, (i.e., androgynous) (Bem, 1974). The psychological rubric "androgyny" describes those persons who perceive themselves as being both instrumental and expressive, both assertive and yielding, both masculine and feminine (Bem, 1974).

Proceeding with a firm belief in the existence of androgynous persons, Bem (1974) constructed the Bem's Sex Role Inventory (SRI) which places masculinity and femininity on a single dimension, thus allowing for the identification of the androgynous individual. On the BSRI scale individuals score masculine, feminine or androgynous according to the degree of difference between their masculinity and femininity scores. Using the BSRI to classify individuals masculine, feminine or androgynous, Bem (1974) tested the assumption that sex-typing contributes to psychological well-being and behavioral flexibility. Bem tested the hypothesis that sex-typed individuals would tend to exhibit defensive trait-like consistency in their responses to situations which call for behavior in conflict with their perceived sex role expectations (i.e., feminine, or masculine). Androgynous individuals as Bem hypothesized are expected to exhibit behavioral flexibility by performing effectively in both the instrumental and expressive domains.

The experimental results of Bem's (1974) research found that given an instrumental task, males and females who scored androgynous or masculine on the BSRI performed significantly better than males and females

who scored feminine. When given an expressive task, Bem found that androgynous and feminine males performed significantly better than masculine males.

The female subjects, however, did not perform as expected. Of the three expressive tasks administered (i.e., initiating play with a tiny kitten, interaction with a baby, and acting as a sympathetic listener) the feminine women performed better on only one task, being the sympathetic listener. Also contrary to her hypothesis, the masculine women showed no deficit in the expressive domain. Bem (1975) concludes, "... the masculine women appear to join their androgynous sisters in functioning effectively, for they too show no particular deficiency in either domain... (they) did not shun cross-sex activity, and they maintained their independence under pressure to conform" (p.21). In interpreting these results Bem states,

These results strongly suggest that growing up female in our society may be sufficient to give all women at least an adequate threshold of emotional responsiveness, and that what differentiates women from one another is not the domain of expressiveness or communion, but whether their sense of instrumentality or agency has been sufficiently nourished as well. (p.21).

As a whole, Bem's research shows that individuals with androgynous capabilities are more likely to possess behavioral flexibility and psychological well-being in today's complex society.

An important societal problem, stemming from this research, concerns the vital need to develop in females a sense of instrumentality. In addressing this problem three important issues must be raised. The first concerns how females might come to feel instrumental. An understanding of this issue is suggested by self perception theory which states that,

Individuals come to 'know' their own attitudes, emotions and other internal states partially by inferring them from observations of their own overt behavior and/or the circumstances in which this behavior occurs" (Bem, D., 1972, p.2).

This suggests that the process of socialization can work in both directions, i.e., "I am what others tell me I should be" and "I am the way I see myself behave."

According to this theory, females may come to view themselves as being capable of instrumental activity if they observe themselves engaging in instrumental activities.

The second issue concerns what activities may facilitate instrumental development. Assuming sport provides instrumental experiences and research shows that females benefit psychologically if their sense of instrumentality is nourished, then sport could and should make a significant contribution to the development of female instrumentality.

The final problem concerns how to induce females to engage in instrumental activities given that "feminine" females avoid participation in such cross sexed-typed activities. (Bem, 1974).

In attracting females to the sport experience, one of the more important aspects to consider may be the way sport is perceived. Such perception may influence both the type and number of females attracted to the sport experience. In addition, how sport is conducted influences the kind and quality of experience provided by the sport encounter.

As a result of various social forces (e.g., the Women's Movement, Civil Rights Movement) U.S. culture is slowly evolving its view of sport, especially as it relates to female participation. The direction of

change is from a perception of sport as an "agent of masculine orientation" to a perception of sport as an "instrumental" activity open to and desirable for both sexes. A third and more desirable perception of sport as an "androgynous" activity, that is, an activity which requires and fulfills both instrumental and expressive tendencies is proposed.

The following sections explore these three cultural perceptions of sport, and the effects of these perceptions on the type and number of females attracted to the sport experience.

Sport as an Agent of Masculine Orientation

Literature in the fields of psychology and sport psychology give much support to the view that sport and athletics are generally perceived as a male sex-typed activity (Bardick, 1971; Cratty, 1967; Kagan, 1962). Everything from children's textbooks to the toys parents buy for their children attests to the perceived masculine orientation of sport.

Experiments on parents indicate that male infants are physically stimulated, thrown about and played with more roughly than their female counterparts. Although there is no physical rationale to justify differential treatment, parents treat female infants as if they were more fragile. Research involving older children finds that parents give male children more autonomy and freedom to explore the environment than female children. These freedoms correlate highly with non-verbal and spatial abilities in which boys, on the average, excel girls (Cratty, 1968; Kagan, 1962).

One of the most extreme sex differences found in childhood occurs in play behavior. Boys and girls discover early what are considered appro-

priate games, toys and playmates for their sex. In nursery school boys tend to play in larger groups than girls and tend to aggress and roughhouse more than girls. By second grade both girls and boys classify athletics as a masculine activity (Stein & Smihells, 1969).

In elementary textbooks the masculine image of activity is reinforced. Child, Potter and Levine (1960) discovered that girls in these books risk little and gain little. The passivity ascribed females causes them to be portrayed as lazy far more often than males. Investigating California State Series texts, Kidd (1970) found sexual role dramatized in the following way:

"Mark! Janet...!" said Mother
"What is going on here?"
"She cannot skate," said Mark
"I can help her.
I want to help her.
Look at her, Mother.
Just look at her.
She is just like a girl.
She gives up."

Mother forces Janet to try again.

"Now you see," said Mark.
"Now you can skate.
But just with me to help you." (p.35)

These books reinforce in the minds of girls and boys that sport, vigorous activity and risk-taking are appropriate behaviors for males but not for females. As Bem (1972) states, "When females appear, they are noteworthy primarily for what they do not do. Boys in these stories climb trees and fish and roll in the leaves and skate. Girls watch, fall down, and get dizzy." (p.8).

Within the framework of this perception the female psyche is perceived

as too weak or nervous for the strain of sport competition and the female body is described as inefficient or unsuited for sports (Burchenal, 1919). Participation of females in sport is seen somehow to lower the quality of sport participation and spectatorship (Gilbert & Williamson, 1973). The results of perceiving sport as an agent of masculine orientation has serious consequences for the conduction of sport programs.

The primary indication that sport is being conducted as a male sex-typed activity is the greatly different status accorded male and female sport programs. The higher priority given male sport programs as regards facilities, equipment, publicity, coaches' salaries, training, awards, and budget indicates that sport is being perceived as an activity considered primarily for males.

Within the sex-typed view of sport, girls are more likely to come to view their bodies as passive objects to be adorned rather than as active and able agents to be used to control and direct their destiny. Consequently, females are less likely to develop their physical potentials. Sex-typing sport and sport proficiency as masculine, tends to set up the masculine standard as the norm. Thus if a girl runs or bats a ball correctly, she is said to "Run like a boy" or "Bat like a guy". Females come to learn that correct and coordinated movement patterns are associated with males and that uncoordinated and inefficient movement patterns are associated with females. This attitude can detrimentally affect movement patterns and physical attributes and thus severely handicap women with regard to their perceived or actual ability to operate, by choice or by chance, independently without the protection or assistance of a male.

Sport perceived and conducted as an agent of masculine orientation thus appears to have a number of negative consequences for females. However, one final characteristic of this sport perception is important to mention. Sport perceived as an agent of masculine orientation is conducted as a highly instrumental activity and is characterized by a strong emphasis on the participant's autonomy-power capabilities and the end results achieved. Sport conducted with such extreme instrumental orientation is likely to develop the characteristics of high masculinity. That is, sport, untempered by a sufficient concern and sensitivity to people and process, is likely to be characterized by arrogance, exploitation and callosity. The traditionally unexpected involvement of women in sport has resulted in women avoiding the roles of sport victim or victimizer, roles which often characterize activities conducted with extreme instrumental orientations.

Implications

The major result of perceiving sport as an "agent of masculine orientation", that is an instrumental activity suitable only for males, is that a majority of females will not desire prolonged or serious participation in such an activity. This fact has been substantiated by research which has found that the importance of participating in sport declines drastically for girls around puberty (Cratty, 1967; Tyler, 1973). The important issue of female performance in sport and female attraction to sport must be considered when evaluating the effects of sport perception.

Using Bem's psychological categories, predictions can be made about

how psychologically predisposed each group of females is toward high performance in sport. Holding physical potential constant, both androgynous and masculine females should be able to perform well on a cross sex-typed activity like sport. The "feminine" female, however, given the same physical potential performance, would not be expected to perform as well. Because of her sex typing she would very likely experience psychological conflicts which would inhibit her performance.

If one assumes that people are attracted to those activities they perceive as being compatible with their own psychological frameworks then it is possible to determine how attracted each female group is to the sport experience. Bem's data suggests that "feminine" females when given a choice, would reject sport as an activity they would enjoy performing because they perceive sport as a cross sex-typed activity and would therefore feel uncomfortable performing instrumentally.

Masculine and androgynous females, however, would be expected to exhibit an attraction to sport with the masculine females possibly exhibiting the stronger attraction.

In summary, sport, when perceived as an instrumental, cross sex-typed activity has little overall appeal to women and has a very low appeal to the feminine female who, in fact, has the greatest need for experiencing such instrumental activities.

Sport as an Instrumental Activity for Both Sexes

The cultural perception of sport as an instrumental activity open to and desirable for females is a growing but not yet established perception. This perception enlarges upon the sex-typed perception of sport as an agent

of masculine orientation by advocating that females can and should benefit from the instrumental sport experience. An important aspect of this perception of sport is the right of women to develop their physical potentials, appreciate their physical abilities and enjoy the mastery of their body in sporting activity.

Another aspect is the equalitarian approach to sport which claims that if participation in sport is going to mold leaders, build stamina, heighten competitive spirit, produce physical fitness, create mental toughness and put students through college, then girls, as well as boys, should have equal opportunity to participate in sport and gain such benefits. However, sport perceived as an instrumental activity for both sexes is based upon and includes more than just the value of equalitarianism. Viewing sport from this perspective affects the sex-typed value of instrumentality.

The effect of changing the perception of sport from a sex-typed activity to a sex neutral activity has some intriguing psycho-social consequences.

Society has traditionally expected males to be instrumental, not expressive and females to be expressive, not instrumental. Perceiving sport as an instrumental activity open to and desirable for both sexes in effect says instrumentality is a valuable trait for both males and females. This neutralization of instrumentality as a male preserve does not in any way neutralize expressivity as a female preserve. Thus, under this perception males are still expected to be solely instrumental while females are expected to be both instrumental and expressive. The perception that instrumentality is important for both sexes has the effect of elevating the status

of instrumental traits and behaviors over expressive traits and behaviors. One further step results in the subtle assumption that instrumentality is the only orientation for a healthy adult to possess (Broverman et. al., 1970).

As an instrumental activity, sports focus is a product versus process orientation. Instrumental sport is primarily concerned with the ends achieved. This instrumental perspective is successfully portrayed in common locker room slogans such as those reported by Snyder (1972). These slogans deal with themes of aggressiveness, competitive spirit, stamina, and discipline, all important aspects of instrumental sport.

Win by as many points as possible.
Be good or be gone
Winning beats anything that comes in second
No one likes a loser
A moral victory is like kissing your sister
They ask not how you played the game but whether
you won or lost
Be a doer not a trier
We don't want excuses we want results (pp. 94-97)

Women's orientation to sport has traditionally not been this highly instrumental. In fact, research on sex differences in achievement motivation and task competence (Veroff, McClelland, & Ruhland, 1975) indicates that women "do not especially learn to value assertive competence above other goals" (p.187) especially those of affiliation or acceptance by others. Females are more oriented toward "Doing something for its own sake without concern for payoff value, becoming absorbed in the task whatever its difficulty" (p.189) whereas the male orientation is toward "power of winning over the demands of an external task," (p.193) toward "performance that requires assertiveness via power, autonomy and achievement" (p.186). Researchers do, however, suggest that given consistent exposure to socially evaluative settings, females are likely to adopt the more instrumental orientation (Veroff et. al., 1975).

Sport conducted as an instrumental activity valuable to both sexes is as stated previously, a philosophically equalitarian approach to sport and is characterized by a sexually equal apportionment of sport opportunities and materials. Recent legislations, such as Title IX of the Educational Amendments Act of 1972, reflects the legal efforts to bring about comparable sport programs in terms of curricular offerings, facilities, scholarships, competitive opportunities, budget, training and coaching.

Implications

Again the assessment must be made as to which females would be attracted to sport perceived as an instrumental activity and how well they would perform. Bem's (1975) data would support the hypotheses that masculine and androgynous women would react as they did to sport as a cross sex-typed activity. Both androgynous and masculine women should perform well and be attracted to sport as an instrumental activity with the masculine women showing a stronger attraction. Given that sport is defined as instrumental activity open to both sexes, the "feminine" females would have a low to moderate attraction to sport but their actual performance in sport would still likely be low in comparison to masculine and androgynous women.

The Future of Sport: Androgyny

Androgynous sport is perceived as an activity in which both instrumental and expressive behaviors are experienced, where agency and communion can merge (Bem, 1975). Western culture perceives sport as primarily instrumental. The question to ask is whether only instrumental qualities

are inherent in sport or whether Western societies have merely inhibited or ignored what might be termed the more expressive aspects of the sport experience.

Perceiving sport androgynously is possible because sport is basically human movement and human movement has an infinite variety of qualities. The instrumental view of sport does not necessarily encourage the recognition or emphasis of expressive experiences. An androgynous view of sport recognizes the importance of both the sport process and the sport product.

Historically and philosophically the majority of women leaders in physical education have directed their programs for girls from what may be termed an expressive perspective. Product (i.e., winners, stiff competition, high level performance, dedicated training) was ideally to play a subordinate role to process (Burchenal, 1919). Given this expressive ideal as the goal, but aware of the product orientation of sport as males played it, (in practice), many female sport encounters were probably quite androgynous.

Some present day organizations are attempting to combine this process-product orientation of sport. The Escalen Sport Institute is one example of an organization which is conducting sport from a more androgynous perspective. An expert from the Escalen Sport Center News states:

Western Culture is goal and competition oriented. Many of us over-emphasize these aspects and in the process lose the sense of present-time involvement. With it we lose the intense joy of immediacy and the kind of focus that allows for supreme performance, no matter what the activity. One of the greatest challenges to modern man is finding personal balance. (Spino, 1973, p2)

The traditional Eastern orientation to sport is also a more process-product approach which emphasizes body awareness, sensitivity-meditation, and joy. The path of sensitivity to the expressive element in sport culminates in quality performance (Smith, 1975). Authors writing on the humanistic movement in sport have also urged that present day instrumental sport become more attuned to the individual, to the expressive element in sport, to the zestful process of sport itself (Andrews, 1974; Scott, 1974).

Androgynous sport may be difficult to experience if teammates, opponents and coaches approach sport from a totally instrumental perspective. It may also be difficult to experience given the research on overjustification effects, (Lepper & Greene, 1973) if money, scholarships and extrinsic incentives are perceived as improving the total sport experience. Extrinsic motivations may benefit instrumental sport but may retard the experience of androgynous sport.

Implications

Bem's research would support the hypothesis that androgynous and masculine women would both be able to perform well in androgynous sport. In considering attraction to sport, both masculine and androgynous females should be attracted to sport with the androgynous females being likely to exhibit the stronger attraction. Finally, the feminine woman, who at last has found a substantial expressive component in sport, would for the first time, be expected to perform moderately well. Feminine females would also be expected to show a moderate attraction to androgynous sport.

Androgynous sport would be expected to appeal to the largest number of female participants. Those females who perceive themselves as highly

expressive would be able to feel that sport is an activity which could fulfill expressive needs. Likewise, androgynous sport would also appeal to those females who enjoy seeking out instrumental activities.

Returning once again to Bem's (1975) conclusion, if it is true that "what separates women from one another is...whether their sense of instrumentality or agency has been sufficiently nourished..." (p.21) then, as a means of attracting feminine females to engage in instrumental activities, androgynous sport would appear to be the most attractive perception of sport.

Hypotheses

Given the male perception of sport, as an agent of masculine orientation, in this study the author hypothesized that sport attracts males who are predominately masculine. The author further hypothesized that given the traditional philosophy of sport for women with emphasis on sport instrumentality and expressivity, sport would tend to attract predominately androgynous females.

Procedures

The author administered the Bem's Sex Role Inventory (BSRI) to 45 female physical education majors (N=45), 20 female varsity athletes (N=20), 35 male physical education majors (N=35), and 45 male varsity athletes (N=45) at the University of Pittsburgh. The male athletes participated in either track, swimming or wrestling and the female athletes were members of the gymnastic, track or swimming teams.

Individual t-ratios were calculated to determine each subjects Androgyny Score. This score represents the difference between a subject's masculine and feminine self-endorsement on the BSRI. A t-test was then

conducted between males and females from each sample on the Masculine Scale and Feminine Scale.

Results

Table 1 presents the mean Masculinity and Femininity Scores separately by sex for both physical education majors and athletes. As Table 1 indicates, males from both samples scored significantly higher than females on the Masculinity Scale and females scored significantly higher than males on the Femininity Scale.

Table 2 shows the percentage of subjects who rank as Masculine, Feminine or Androgynous as a function of the Androgyny t-ratio. As hypothesized the majority of males in both samples scored on the masculine side of androgyny. In both samples the greatest percentage of females were found in the androgynous category.

Table 3 presents a comparison between Bem's (1974) normative sample of undergraduates at Stanford University and the sample of physical education majors and athletes at the University of Pittsburgh. When compared to Bem's sample of non-majors, a greater percentage of male majors and athletes are found in the highly masculine category. Likewise, in comparing the female majors and athletes to Bem's female sample at Stanford, the female athlete and physical education major samples show a higher percentage of androgyny.

Conclusions

The results of this study support the contention that sport viewed as an agent of masculine orientation is most likely to attract the highly

sex-typed male. Sport viewed from this perspective appears as an activity which reinforces instrumental qualities while at the same time inhibits or discourages expressive qualities.

For the female physical education major, the results indicate that the situations of sport and teaching sport attract the more androgynous woman. The small percentage of feminine majors attests to the instrumental or androgynous perception of sport. The female athletes, although very androgynous, scored much higher on the feminine side of androgyny than did their sisters in physical education. The small sample of female athletes (N=20) and the predominance of gymnasts and swimmers (considered traditionally feminine activities), could have biased these percentages.

Future research should be conducted on athlete groups using the BSRI in combination with a sport perception scale which would indicate which cultural perception the athlete has adopted toward sport. The changing perception of sport in American life indicates that this avenue of research would be both highly interesting and professionally valuable.

References

- Andrews, M. Physical education and reports: business as usual sport res. by any means necessary. In G. McGlynn, (Ed.), Issues in physical education and sports. Palo Alto, California: National Press Books, 1974. pp. 131-193.
- Bardwick, J. Psychology of Women: a study of bio-cultural conflicts. New York: Harper & Row, 1971.
- Bem, D. Self Perception Theory. New York: Academic Press Incorporated, 1972.
- Bem, S. and Bem, D. Homogenizing the American Woman: the power of an unconscious ideology. Unpublished manuscript, 1972. p.8.
- Bem, S. Psychology looks at sex roles: where have all the androgynous people gone? Paper presented at the UCLA Symposium on Women, Los Angeles, May 1972.
- Bem, S. The measurement of psychological androgyny. Journal of Consulting and Clinical Psychology, 1974. 42, 155-162.
- Bem, S. Sex role adaptability: one consequence of psychological androgyny. Journal of Personality and Social Psychology, 1975. 31, 634-643.
- Bem, S. Beyond androgyny: some presumptuous prescriptions for a liberated sexual identity. Paper presented at the national Institute of Mental Health Conference on New Directions for Research in the Psychology of Women, Madison, Wisconsin. May, 1975.
- Bird, E. J. A review and evaluation of the assessment of aggression among women athletes as measured by personality inventories. Proceedings of the fourth Canadian symposium on psycho-motor learning and sport psychology. Waterloo, Ontario, Canada, October, 1972. 353-364.
- Broverman, I. K. Broverman, D. M., Clarkson, F. E., Rosenkrantz, P. S., and Vogel, S. R. Sex role stereotypes and clinical judgments of mental health. Journal of Clinical and Consulting Psychology, 1970, 34, 1-7.
- Burchenal, E. A constructive program of athletics for school girls: policy, method and activities. American Physical Education Review. 1919, 24, No. 5, 272-279.
- Child, S., Potter, E. and Levine, E. Children's textbooks and personality development: an exploration in the social psychology of education. In. J. Posenbleth and W. Allensmith, (Ed.), Causes of Behavior: readings in child development and educational psychology. Rockleigh, NJ: Allyn, 1960.

- Casentino, F. and Heilbrun, A. Anxiety correlates of sex-role identity in college students. Psychology Reports, 1974, 14, 729-730.
- Cratty, B. Social dimensions of physical activity. Englewood Cliffs, New Jersey: Prentice-Hall Incorporated. 1967.
- Cratty, B. Psychology and physical activity. Englewood Cliffs, New Jersey: Prentice Hall, 1968.
- Dayries, J. and Grimm, R. Personality Traits of Women Athletes as measured by the Edwards Personal Preference Schedule. Perceptual and Motor Skills. 1970, 30, 229-230.
- Edwards, H. Sociology of Sport. Homewood, Illinois: The Dorsey Press, 1973.
- Fisher, A. Sports as an agent of masculine orientation. The Physical Educator, 1972, 29, 120-121.
- Gilbert, B. and Williamson, N. Sport is Unfair to Women. Sports Illustrated. May 28, 1973, 88-93.
- Gilbert, B. and Williamson, N. Are you closed minded? Sports Illustrated. June 4, 1973, 45-55.
- Gray, S. Masculinity-femininity in relation to anxiety and social acceptance. Child Development, 1957, 28, 203-214.
- Harford, T., Willis, C., and Deabler, H. Personality correlates of masculinity-femininity. Psychological Reports, 1967, 21, 881-884.
- Hart, M. Stigma or prestige: the all American choice. In G. McGlynn (ed.), Issues in physical education and sports, 1974, pp.214-220.
- Hoch, P. Rip off the big game. Garden City, New York: Doubleday & Company, Incorporated. 1972.
- Ibrahim, H. Comparison of temperment traits among intercollegiate athletes and physical education majors. Research Quarterly, 1967, 38, 615-622.
- Kagan, J. and Moss, H. Birth to Maturity. New York: John Wiley and Sons, Incorporated. 1962.
- Kidd, V. Now you see, said Mark. New York Review of Books. September, 1970, p.35.
- Lepper, M. R., Greene, D. and Nisbett, R. Undermining children's intrinsic interest with extrinsic reward: a test of the overjustification hypothesis. Journal of Personality and Social Psychology, 1973, 28, 129-137.

- Maccoby, E. E. Sex differences in intellectual functioning. In E.E. Maccoby (Ed.), The Development of Sex Differences. Stanford, California: Stanford University Press, 1966, pp.25-55.
- Malumphy, T. Personality of women athletes in intercollegiate competition. Research Quarterly, 1968, 36, 610-620.
- Mussen, P. Some antecedents and consequents of masculine sex-typing in adolescent boys. Psychological Monographs, 1961, 75, No. 506.
- Mussen, P. Long-term consequents of masculinity of interests in adolescence. Journal of Consulting Psychology, 1962, 26, 435-440.
- Neal, P. Personality traits of US women athletes who participated in the 1959 Pan-American Games as measured by EEPS. Master's thesis, University of Utah, Salt Lake City, Utah, 1963.
- Ortner, S. Is female to male as nature is to culture? In M. Rosaldo and L. Lamphere, (Eds.), Woman, Culture and Society. Stanford, California: Stanford University Press, 1974, pp.67-87.
- Rector, J. Selected personality variables in social and competitive situations as perceived by female athletes. Masters of Sciences Thesis. Pennsylvania State University. 1971.
- Scott, J. Sport and the radical ethic. In G. McGlynn, (Ed.), Issues in Physical Education and Sport. Palo Alto, California: National Press Books. 1974, pp. 155-162.
- Snyder, E. Athletic dressing room slogans as folklore; a means of socialization. International Review of Sport Sociology, 1972. 39-100.
- Smith, A. The Zen approach to sports. Psychology Today, 1975, 9, No.5, 48.
- Spino, M. Sports and the energy body. Escelen Sports Center News. 1973. 1, No. 2.
- Stein, A. and Smihells, J. Age and sex differences in children's sex role standards about achievement. Developmental Psychology, 1969, 1.
- Tyler, S. Adolescent crisis: sport participation for the female. In D. Harris (Ed.), DCWS Research Reports: Women in Sports. 1973, Vol. 2, pp. 27-33.
- Veroff, J., McClelland, D., and Ruhland, D. Varieties of Achievement Motivation. In H. Mednick, S. Tangri, and L. Hoffman (Eds.), Women and Achievement. Washington, D.C.: Hemisphere Publishing Corporation, 1975. pp. 172-205.

Van Dalen, M. and Bennett, S. A World history of physical education.
Englewood Cliffs, New Jersey: Prentice Hall, Incorporated. 1958.

Webb, A. Sex role preferences and adjustment in early adolescents.
Child Development, 1963, 34 609-618.

Werner, P. The role of physical education in gender identification.
The Physical Educator, 1972, 29, 27-28.

Zobel, J. Femininity and achievement in sports. In D. Harris, (Ed.),
Women and Sport: a National Research Conference. Pennsylvania State
IPER Series No. 2, 1972, p. 203-224.

Table 1
Sex Differences on the BSRI

	University of Pittsburgh PE Majors			University of Pittsburgh Varsity Athletes		
	Males (N=35)	Females (N=45)	t	Males (n=45)	Females (n=20)	t
Masculinity Mean (s.d.)	5.57 (.63)	5.30 (.46)	2.22*	5.98 (2.95)	5.08 (.57)	3.11**
Femininity Mean (s.d.)	4.58 (.59)	5.17 (.45)	4.94***	4.50 (.51)	5.26 (.52)	5.51***

* p < .05
** p < .01
*** p < .001

Table 2
The Percentage of Subjects in the Samples
Classified as Masculine, Feminine, or Androgynous

	Physical Education Majors		Varsity Athletes	
	Males (N=35)	Females (N=45)	Males (N=45)	Females (N=20)
% Feminine ($t \geq 2.025$)	0%	4%	0%	25%
% Near Feminine ($1 < t < 2.025$)	11%	7%	0%	5%
% Androgynous ($-1 < t < +1$)	9%	60%	18%	40%
% Near Masculine ($-2.025 < t < -1$)	14%	18%	29%	10%
% Masculine ($t \leq -2.025$)	66%	11%	53%	10%

Table 3:
 Comparison Between the Percentage of Subjects Classified
 as Masculine, Feminine, or Androgynous in the
 Pittsburgh Sample and the Stanford Normative Sample

	Physical Education Majors		Varsity Athletes		Stanford University	
	Males (n=3)	Females (N=45)	Males (N=45)	Females (N=20)	Males (n=444)	Females (n=279)
Feminine ($t > 2.025$)	0%	4%	0%	25%	6%	34%
Near Feminine ($t < 2.025$)	0%	7%	0%	15%	5%	20%
Androgynous ($t < + 1$)	0%	6%	18%	40%	34%	27%
Near Masculine ($t < - 1$)	14%	18%	29%	10%	19%	12%
Masculine ($t < - 2.025$)	66%	11%	53%	10%	36%	8%

S. The Measurement of Psychological androgyny. Journal of Consulting and Clinical Psychology, 1974, 42, 155-162.