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# Psychological gender of sportsmen in team sports

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### Abstract

One of the best-defined concepts of social constructivism is the Gender Schema Theory by Sandra Bem. According to this theory, every person has two dimensions – femininity and masculinity. Basing on their intensity we can distinguish four psychological genders: sex-typed, cross-sex-typed, androgynous and undifferentiated. The aim of this study was to determine the most typical psychological genders characterizing male and female athletes in team sports (football, field hockey, volleyball, basketball, and handball). There were 49 women aged between 19 and 32 years old ( $M = 22.82$ ) and 56 men aged between 18 and 31 years old ( $M = 21.54$ ) participating in the study. In order to determine psychological genders, we used IPP (Inwentarz do Oceny Płci Psychologicznej) by Kuczyńska. Pearson's  $\chi^2$  test showed that in the group of women who play team sports, androgynous psychological gender is the most popular (63.27%). For men who play team sports the most common were: sex-typed (44.64%) and androgynous psychological gender (35.71%).

**KEYWORDS:** femininity, masculinity, psychological gender, team sports.

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### Introduction

The topic of gender has been discussed by specialist of many branches of science. The discussion very often concerns two terms: sex (biological) and gender (cultural). Based on the second term (gender), a psychological theory was created, which describes two independent dimensions: femininity and masculinity. The level of these dimensions can influence the person's behavior, interests or the level of adaptation to some conditions, which can be significant in the case of people engaged in sports activities.

### Gender types

One of the best-verified concepts of social constructivism (which determines that gender can be socially shaped) is the Gender Schema Theory by Sandra Bem [2, 3, 5]. The researcher proved that everyone can be characterized by two dimensions, which do not exclude each other [3, 4]. These dimensions are psychological femininity and masculinity.

Based on the measurement of these two psychological features, one of four psychological gender types can be determined. According to Bem's Gender Schema Theory [2, 3], we distinguish people:

1. Sex-typed – they have features typical for their biological sex. They are characterized by higher readiness to behaviors consistent with self-image.
2. Androgynous – they are characterized by similar levels of male and female features, regardless of their biological sex. Their behavior can be characteristic for both genders, without the feeling of discomfort. They can adjust to the new situation

thanks to the wide repertoire of constructive behaviors. In comparison to other configurations, androgynous people function the most effectively in social, cognitive and professional areas [15].

3. Undifferentiated – they are characterized by underdeveloped male or female features (low level of these features), regardless of their biological sex.
4. Cross-sex-typed – they reveal features which are appropriate to the opposite biological sex (e.g. men with high femininity level).

Discussing Sandra Bem's Gender Schema Theory it is worth to pay attention to the issue of psychological gender types in different social and professional groups. In this article, the tests concerning people who play sports will be presented, which will be a benchmark for the analysis of our research.

### Psychological gender of different sport disciplines players

Based on existing analyses concerning sports activities, it was stated that men with high level of male features and low level of female features want to take part in sport disciplines that are seen as female sports significantly less frequently than androgynous men and men with low level of psychological femininity and masculinity. Sex-typed women chose sport disciplines which are seen as masculine less frequently than androgynous women and cross-sex-typed women [12]. It was confirmed by testing gymnasts, who had an excess of male and a deficiency of female types [18].

Kłodecka-Różalska and Kownacka [10] confirmed that among sportswomen who do judo or fencing, similarly to men doing fencing, the most dominant are androgynous people. Among people who play fight sports (which are typically seen as a sport for men) the most dominant are sex-typed people. Burdzicka-Wołowik [7] claimed that among women who play basketball, swim, or do gymnastics, the most dominant are these of androgynous type and among women who do judo, wrestling or box, the most are women with high level of features usually attributed to men. The results of Mikołajczyk's research [13] were similar. She noticed that sportsmen and the female students of physical education, in comparison to people who do not play any sports, represent androgynous and cross-sex-typed groups more often. In another research, Ugucconi and Ballantyne [20] showed that among sportsmen and sportswomen, androgynous people are more dominant than in general population (high level of both female and male features).

Starzomska and Kowalczyk [17] showed that men who play football (which is seen as a sport for men) have

a lower level of femininity comparing to men who train figure skating (which is seen as a sport for women). Therefore, men who play football are characterized by gender consistent with their biological sex. Pacut [14] also showed that among women who play football the most dominant type is androgynous. According to Soroka and Bergier [16], 70% of women who play football are androgynous.

### Aim of the study and hypotheses

The aim of this study was to find the most typical psychological genders of male and female players in team sports. Based on the aim of our study and the literature review, we hypothesize that:

1. sportswomen usually represent androgynous gender,
2. sportsmen usually represent sex-typed gender.

### Participants and research tools

We tested 49 women aged between 19 and 32 years old ( $M = 22.82$ ;  $SD = 2.721$ ) who played such sports as: football, handball, field hockey, volleyball, and basketball. On average, they have played sport for 9.27 years ( $Me = 10$  years;  $SD = 4.310$ ). The second team consisted of 56 men aged between 18 and 31 years old ( $M = 21.54$ ;  $SD = 2.351$ ) who played: football, field hockey, volleyball, basketball, and handball. On average, they have played for 9.84 years ( $Me = 9.5$ ;  $SD = 4.475$ ).

In the research IPP (Inwentarz do Oceny Płci Psychologicznej) [11] was used, which had been designed on the basis of Bem Sex Role Inventory (BSRI). Participants task was to determine a degree to which they were characterized by each of 35 features – 15 of these features were stereotypically attributed to women and 15 to men. The final result was the sum of points for Woman Scale (Skala Kobiecości – K) and Man Scale (Skala Męskości – M).

Statistical analyses were made using Statistica 12.0 software. Normal distribution was confirmed by Shapiro–Wilk test, and later Pearson's  $\chi^2$  test was conducted.

### Results

The aim of the conducted analysis was to determine the most dominant and the least dominant psychological gender among participants. A statistically significant ( $\chi^2 = 23.38$ ;  $df = 3$ ;  $p < 0.001$ ) difference in the types of genders was found among male and female participants. The most dominant gender among women playing team sports was the androgynous gender (63.27%). There were fewer women of cross-sex-typed gender (22.45%),

**Table 1.** Types of psychological gender among men and women

Biological sex of players	Gender types				
	Androgynous	Sex-types	Undifferentiated	Cross-sex-typed	All
Women	31	3	4	11	N = 49
%	<b>63.27%</b>	6.12%	8.16%	22.45%	100%
Men	20	25	7	4	N = 56
%	35.71%	<b>44.64%</b>	12.50%	7.14%	100%

undifferentiated gender (8.16%) and sex-typed gender (6.12%). The most dominant gender among men playing team sports was the sex-typed gender, after which there came androgynous (35.71%), undifferentiated (12.5%) and cross-sex-typed (7.14%) gender (Table 1).

### Discussion and conclusions

Based on the interpretations of four main configurations of psychological traits [2, 11] it was stated that among women the most dominant was androgynous gender [1]. It is consistent with the results of previous research [7, 10, 13, 14, 16, 20]. This result can stem from the fact that androgynous people are characterized by behaviors available for both sexes and that they are in possession of a wider range of behaviors, adjusting them to the situation [10]. They can function more effectively and they adjust to the variable environmental conditions. As a result, they can compete in sport more effectively [7], as this kind of competition is characterized by high dynamics, variability and high speed [19].

At the same time, it was stated that among female participants, sex-typed gender and undifferentiated gender (less intensity of femininity and masculinity) were less frequent. They are both characterized by a low level of masculinity in comparison to other gender types [6] and according to this, these people can have a problem with competing which is connected with quick action. This is supported by the research of Matteo [12], which showed that sex-typed women are less interested in sports seen as masculine than, for example, androgynous women. Similar results were achieved with regard to everyday life, where people with low level of masculinity are less socially adapted [6]. Summing up, it should be said that the first hypothesis was positively verified.

The results of the analysis of psychological gender among sportsmen will be discussed separately. The most dominant turned out to be sex-typed gender which is characterized by high level of masculinity and is connected with aggressiveness, self-confidence and success orientation [8, 10]. The fewest men represented

cross-sex-typed gender („feminine men”). These results can be explained referring to the requirements to compete with other people, that are not met by people with low level of masculinity and high level of femininity. In this context, the fact that they give up playing sports which create a complicated social situation clearly indicate the need for sport selection [9]. The result of the author's research is consistent with the result of Kłodecka-Różalska and Kownacka [10] as well as of Starzomska and Kowalczyk [17], who showed that sex-typed men more often play typically masculine sports (including team sports). Therefore, it can be concluded that the second hypothesis was positively verified.

Previous research and the results of this study allow to draw the following conclusions:

1. Among women who play team sports, the most dominant was the androgynous gender.
2. Among men who play team sports, the most dominant was sex-typed gender.

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