

SHORT REPORT

Objective and Subjective Assessments of the Psychological Gender of Female Athletes Practicing Martial Arts

Aleksander Yurevich Osipov^{1,2,3}, Viktor Nikolayevich Kovalev¹, Sergey Leonidovich Sadyrin¹, Roman Sergeevich Nagovitsyn⁴, Lyubov Vladimirovna Rubtsova⁵, Olga Yurievna Druzhinina⁵, Tatyana Vladimirovna Zhavner¹ and Anna Vladimirovna Vapaeva¹

¹Siberian Federal University, Department of Physical Culture, Krasnoyarsk, Russia, ²Krasnoyarsk State Medical University named after Professor V.F. Voyno-Yasenetsky, Department of Physical Culture, Krasnoyarsk, Russia, ³Siberian Law Institute of the MIA of Russia, Department of Physical Training, Krasnoyarsk, Russia, ⁴Glazov State Pedagogical Institute named after V.G. Korolenko, Department of Physical Culture and Safety Life, Glazov, Russia, ⁵Izhevsk State Agricultural Academy, Department of Physical Culture, Izhevsk, Russia

Abstract

Experts indicate the existence of a certain distorted assessment of gender in respect to female athletes practising martial arts. There is a lack of objective data regarding the determination of the predominant traits of the psychological gender of such female athletes. The purpose of the research is to compare objective and subjective data of the psychological gender of female athletes aged 18-26 practising boxing and kickboxing. The sample consisted of 58 female athletes practising boxing and kickboxing at elite and close-to-elite levels for at least five years. Psychological gender was determined using the Sandra L. Bem technique. Independent assessments of the psychological gender of female athletes and their personal trainers were also taken into account. Data analysis was performed using the Mann-Whitney U-test. The data show a significant ($p < 0.05$) predominance of individuals with traits of the androgynous psychological gender of the total number of female athletes. A significant ($p < 0.01$) difference was revealed between the data of an objective assessment and self-assessment of their psychological gender by female athletes. Some athletes with a masculine psychological gender endow themselves with excessive traits of androgyny. It was found that many trainers unreasonably endow their female athletes with excessive features of the masculine psychological gender.

Keywords: female boxing, psychological gender, androgyny, masculinity

Introduction

Comprehensive training of athletes practising martial arts needs high-quality scientific support for competitive activity (Osipov, Kudryavtsev, Iermakov, & Jagiello, 2019). Experts propose using the study of the characteristics of the psychological gender of athletes for an objective scientific assessment of martial arts practices (Channon & Jennings, 2014). Scientists studying the issues of sports psychology of women

practising martial arts indicate a lack of data in determining the psychological gender of women engaged in various types of martial arts (Kavoura, Ryba, & Kokkonen, 2012). Moreover, most of the research is dedicated to male athletes with regard to their psychological adaptation to sports activities (Pacesova, Smela, & Antala, 2019). Experts emphasize the presence of a certain warped judgement of gender in a number of sports (Alvariñas-Villaverde, López-Villar, Fernández-Villarino, &



Correspondence:

A. Osipov

Siberian Federal University, Department of Physical Culture, Avenue Free 79, 660041, Krasnoyarsk, Russia

E-mail: Ale44132272@ya.ru

Alvarez-Esteban, 2017).

Traditionally, most specialists associate various types of martial arts with masculinity, and the participation of female athletes causes some discussion (Kavoura, Kokkonen, Chroni, & Ryba, 2018). There is an opinion about the predominance of psychological masculinity practising different types of martial arts among female athletes (Burdzicka-Wolowik & Goral-Radziszewska, 2014). However, a number of scientists point to the predominance of individuals with the characteristics of the androgynous psychological gender during the self-identification of female athletes practising martial arts (Cardoso et al., 2016). McGannon, Schinke, Ge, and Blodgett (2019) indicate a lack of research in the study of the characteristics of the psychological gender and social gender structure of women boxers of an elite level (McGannon et al., 2019). It is known that various problems of the psychological identity of women practising martial arts, including boxing, have a significant impact on the athletic performance of female athletes (Schinke et al., 2019). Experts indicate that the athletic psychological identity of athletes is closely related to the motivation for engaging in sports activities and that this subject needs to be studied (Hagiwara, Kuroda, Oshita, Shimozono, & Matsuzaki, 2018).

Scientists recognize that the problems of the psychological identity of female athletes practising martial arts are not given due attention in Russia (Osipov et al., 2017). Some aspects of sports psychology, including the psychological gender of athletes, are not taken into account from the selection process for martial arts to the end of a sports career by the trainers (Kovalev, Osipov, Sadyrin, & Nagovitsyn, 2019). There is a need for quality psychological support for athletes maintaining their psychological health (Kuzmin, Larionova, & Murasheva, 2018) and the prevention of psychological stress (Nagovitsyn, Miroshnichenko, Merzlyakova, & Faizullina, 2018).

The objective of the research: to determine the characteristics of the psychological gender of female athletes aged 18-26 years old practising knock types of martial arts: boxing and kickboxing. The correlation has also been investigated between the objective data of the psychological gender and the self-awareness of their psychological identity of female athletes.

Methods

Study participants: women (n=58) who have been practising boxing and kickboxing for at least five years. Sports qualifications of women athletes: candidates for master of sports in boxing (n=35) who are close to the elite level; elite are masters of sports in boxing and kickboxing (n=23). Age of female athletes: from 18 to 26 years old. All athletes gave voluntary informed consent to participate in research. The studies were

approved by the local ethics expert committee of the Institute of Physical Culture, Sports and Tourism (Siberian Federal University).

Organization and research methods: The Sandra L. Bem methodology was used to determine the psychological gender characteristics of female athletes. All participants were asked to answer 60 specially selected questions allowing to evaluate in points the development degree of particular personal qualities. The research participants took part in the survey twice two months apart, thereby increasing the reliability level of the obtained data. Specific questions were answered twice by persons who knew these women well (their relatives, friends and trainers). The average value was determined: the main index (IS) which was finally taken into account from the obtained answer options (each woman and a person familiar with this female) in points in the studies. Before the survey, female athletes were asked to indicate their psychological gender independently. The question about the psychological gender of female athletes was also answered by their trainers.

Statistical analysis: the results of the study were evaluated using the SPSS20 program. The reliability of the obtained data was determined using the Mann-Whitney U-test.

Results

The present study has shown that the most (n=27) female athletes have their signs of androgyny (IS=0.849). Signs of masculine psychological gender were identified among 25 female athletes (IS=-1.813). Also, signs of femininity prevail (IS=1.358) among six female athletes. In independent assessments of their psychological identity, most women (n=33) indicated a predominance of androgynous traits; 17 women attributed themselves to the masculine psychological gender. Eight female athletes classified themselves to the feminine psychological gender. The data revealed a significant ($p<0.05$) predominance of individuals with traits of the androgynous psychological gender in the total number of studied women athletes. A significant ($p<0.01$) difference was found between objective survey data and independent assessments of female athletes by the definition of androgyny and masculinity. There are also significant ($p<0.05$) discrepancies in the results of femininity assessment.

The vast majority (n=34) of female athletes are characterized by masculinity according to the estimates of the personal trainers of the research participants. The trainers of only three women athletes attributed them to the representatives of the feminine psychological gender. The trainers attributed the rest (n=21) of female athletes to the androgynous psychological gender. The main research results are presented in Figure 1.

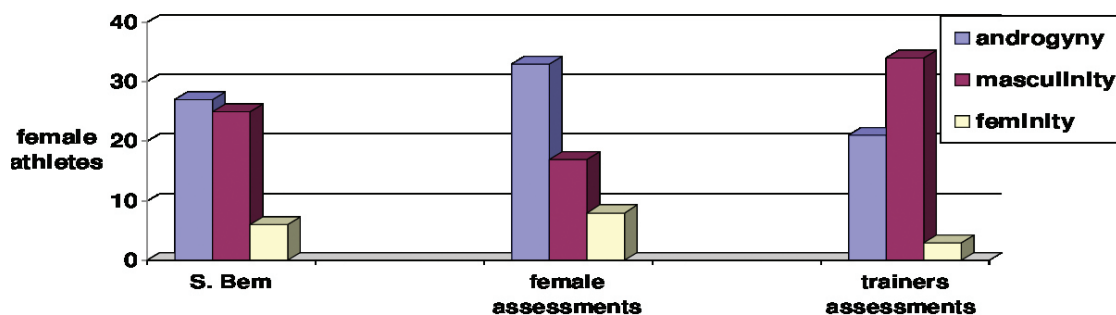


Figure 1. Data about the psychological gender of female athletes

Discussion

Most of the data about the psychological characteristics of female athletes practising boxing are based on one-off surveys or interviews with these individuals. Experts note that one-time interviews do not accurately determine the psychological gender of female athletes. The scientists recommend conducting multiple surveys of female athletes over a long time, thus improving the research quality. It is also useful to interview close acquaintances, relatives, and trainers of the studied female athletes, thus increasing the level of information reliability (McGannon et al., 2019). In our studies, two surveys of the studied female athletes were conducted, in which their close relatives, friends, and trainers were also interviewed.

The literature presents data about the predominance of women with traits of psychological masculinity in martial arts (Burdzicka-Wolowik & Goral-Radziszewska, 2014). In our studies, the majority of female athletes ($n=27$) are dominated by signs of psychological androgyny. Experts note that many women with psychological self-identification practising martial arts usually indicate an androgynous psychological gender (Cardoso et al., 2016). Experts attribute this to the subconscious fears of many female athletes receiving reproaches for excessive masculinity (Read, 2017). In our studies, the majority ($n=33$) of female athletes with an independent assessment of their psychological gender also identified themselves as representatives of the androgynous psychological gender. However, the survey data show that objectively the androgynous psychological gender includes a significantly ($p<0.01$) smaller ($n=27$) number of female athletes.

Studies of the psychological gender characteristics of young (18-22 years old) Russian female athletes practising martial arts have shown a significant (over 70% of the total)

predominance of individuals with psychological androgyny (Kovalev et al., 2019). Masculinity traits were found among only 23% of the participants. In our studies, traits of psychological androgyny were identified among 47% of female athletes aged from 18 to 26 years. The prevalence of masculinity was detected among 45% of the studied female athletes. Perhaps there are more female athletes with a predominance of psychological masculinity at a more mature age (after 22 years) in sports activities. Women with a different psychological gender finish an active sports career in favour of creating a family and having children.

Data from the trainers of the studied female athletes shows that most trainers have attributed excessive masculinity to their athletes. This feature is typical for male trainers who train women in martial arts. Scientists recommend that educational events should be held for trainers with the involvement of psychologists for the correct assessment of the psychological gender and the creation of a favourable psychological atmosphere in women's sports teams (McGannon et al., 2019).

A significant ($p<0.01$) discrepancy between the data of an objective assessment of the gender psychological characteristics of female athletes practising martial arts and the independent psychological identification was revealed among these individuals. Many female athletes fear reproaches of excessive masculinity and endow themselves with excessive traits of androgyny and femininity. The results also show a predominance ($p<0.05$) among the studied female athletes 18-26 years old who are the individuals with features of the androgynous psychological gender. The obtained data are somewhat inconsistent with general ideas about the predominance of masculine psychological traits among the majority of female athletes practising martial arts.

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Conflict of Interest

The authors declare that there are no conflicts of interest.

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