
Sexual Orientation, Gender Identity and Self-Concept Gender Schemas of Women Practitioners of Culturally Masculine Sports

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Abstract

This study aimed to assess sexual orientation, gender identity and psychological gender profile of women athletes engaged in culturally masculine sports (soccer, futsal, Muay-Thai, judo, jiu-jitsu), then to compare sports in relation these three constructs. The sample included 193 women with a mean age of 22.80 ± 5.38 years, of which, 141 (74.21%) reported themselves to be heterosexual, and 99 (51.83%) as androgynous. The psychological gender profiles were 102 (52.85%) feminine heteroschematic. There are no association between gender constructs. The women differed in psychological gender profile dimensions, in which the most evident in masculine schema was audacity and in feminine schema social adjustment. It is concluded that the sexual identity of these female athletes in these sports does not have a predominance of lesbians, masculine nor masculine heteroschematic. However, there may be dimensions of masculinity and femininity of the gender schema that are necessary for women to practice these spots. Thus, the traditional stereotype applied to these women as lesbian does not have any scientific support.

KEYWORDS: Women; Gender Schemas; Sexual Orientation; Sports Psychology.

Orientação Sexual, Identidade de Gênero e Esquemas de Gênero do Autoconceito de Mulheres Praticantes de Esportes Culturalmente Masculinos

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Resumo

O objetivo deste estudo foi avaliar a orientação sexual, a identidade de gênero e o esquema de gênero de mulheres praticantes de esportes culturalmente masculinos (futebol, futsal, muay-thai, judô, jiu-jitsu). Participaram 193 mulheres com média de idade de $22.80 \pm 5,38$ anos, destas 141 (74.21%) se declaram heterossexuais, e 99 (51.83%) andróginas. O perfil dos esquemas de gênero foi 102 (52.85%) heteroesquemáticas femininas. Não há associação entre os construtos de gênero. As mulheres diferem nos fatores dos esquemas de gênero, em que se caracterizou no esquema masculino o fator arrojamento e no feminino o ajustamento social. Conclui-se que a identidade sexual dessas mulheres atletas nestes esportes não possuem um predomínio de lésbicas, masculinas ou heteroesquemáticas masculinas. Entretanto, podem existir dimensões dos esquemas masculino e feminino dos perfis dos esquemas de gênero que talvez sejam necessárias para que mulheres pratiquem estas modalidades. Ressalta-se que o estereotipo tradicionalmente aplicado a estas mulheres como lésbicas não tem suporte científico.

Palavras-chave: Mulheres; Esquemas de Gênero; Orientação Sexual; Psicologia do Esporte.

Orientación Sexual, Identidad del Género y Esquemas de Género del Autoconcepto de Mujeres Praticantes de Deportes Culturalmente Masculinos

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Resumen

El objetivo de este estudio fue evaluar la orientación sexual, identidad del género y el esquema de género de mujeres practicantes de deportes culturalmente masculinos (futsal, fútbol, muay-thai, judo, jiu-jitsu, capoeira). En el caso de las mujeres, las mujeres con una edad promedio de 22.80 ± 5.38 años, de estas 141 (74.21%) se declaran heterossexuales, y 99 (51.83%) andróginas. Lo perfil de los esquemas de género fueron 102 (52.85%) heteroesquemáticas femeninas. Las mujeres difieren en los factores del perfil de los esquemas de género, en los que se caracterizó en lo esquema masculino el factor de arrojanza y en lo esquema femenino el ajuste social. Se puede concluir que la identidad sexual de esas mujeres atletas en estos deportes no poseen un predominio de lesbianas, masculinas o heteroesquemáticas masculinas. Sin embargo, pueden existir dimensiones de masculinidad y femineidad de los perfiles de los esquemas de género que tal vez sean necesarias para que las mujeres practiquen estas modalidades. Se resalta que el estereotipo tradicionalmente aplicado a estas mujeres como lesbianas no tiene soporte científico.

Palabras-clave: Mujeres; Esquemas de Género; Orientación Sexual; Psicología del Deporte.

Introduction

Human behavior shows different ways group classifications through identity, of which the most commonly observed refers to the sexual characteristics of individuals, in which men and women present differentiated roles and behaviors due to sexual dimorphism (Jonason, 2007). At the beginning of the twentieth century, the concepts of masculinity and femininity were conceived from the biological dimorphism that differentiates men from women, that is, being a man is not being a woman and vice versa (Bem, 1974). From the 1970s onwards, however, Bem (1974) proposed a new view of these concepts, conceiving them as two-dimensional and therefore independent of each other. According to Barberá (1998), this new conception breaks with the relationship between biological sex and gender identity. The parallelism between sexual dualism and gender is broken, so that traits of masculinity and femininity, as manifestations of gender, are not limited, nor circumscribed to be biological man or woman.

The introduction of this two-dimensional concept allowed the emergence of a new area of study in gender – psychological androgyny. Defined "as the simultaneous development of male and female characteristics by the same person" (Barberá, 1998), the concept of androgyny has produced a number of studies on gender psychology.

Based on a this framework and on theories previously elaborated to assess this concept, Giavoni (2000) elaborated a new model to evaluate the psychological androgyny: the Interactive Model (Giavoni & Tamayo, 2010). Differently from other models that define androgyny as a specific group, this model predicts that all individuals, regardless of sex, have representatives of masculinity and femininity; thus, all individuals are carriers of different degrees of androgyny (Giavoni & Tamayo, 2010). From this perspective, androgyny becomes a psychological state, resulting from the interaction of masculine and feminine schemas represented in the self-concept (Giavoni, 2000; Giavoni & Tamayo, 2005).

As masculinity and femininity traits are universal concepts present in the most diverse cultures, it can be affirmed that all individuals possess, to a greater or lesser extent, these traits at the level of self-concept, as central structures similar to the personality traits that generate a sense of identity in individuals (Giavoni & Tamayo, 2010). These structures are conceived as lenses that filter perceptions, influencing the way of thinking, feeling, and acting.

The influence that constructs of masculinity and femininity exert on different psychological and social components allows to inference that they are directly related to several dimensions in the sporting area (Cardoso et al., 2017). Although the physiological differences between athletes in relation to sexual differences (male/masculine and female/feminine) have been widely studied, there are few studies dealing with sports (Melo, Giavoni & Custodio, 2012; Melo, Giavoni & Tróccoli, 2004), leisure, and health (Gomes, Sotero, Giavoni and Melo, 2011) in relation to the gender cognitive profile, that is, to the Psychological Gender Profile (Giavoni, 2000).

Often while considering gender identity, there are numerous misconceptions with different constructs such as sexual orientation, constituted by desires, emotions, affections, and attractions to sexual

partners (Bártová & Valentová, 2012; Cardoso, 1996, 2008a, 2008b; Cardoso & Sacomori, 2012; Cardoso & Werner, 2003; De Carvalho, De Oliveira, Sampaio, Ferrari & Cardoso, 2017; Roughgarden, 2004). Gender identity, differently of psychological gender profile, as defined by the individual or defined by others in terms of adherence to traditional gender stereotypes is commonly confused with sexual orientation, but actually only defines the degree of masculinity and femininity that characterizes the appearance and behavior of an individual in terms of masculinity and femininity.

In a recent cross-cultural study, Cardoso (2013) showed that, although there may be associations between these gender identity and sexual orientation, there is no determinism. It ends up generating mistaken and reductionist perceptions, such as the social perception that women practicing sports socially perceived as masculine are also lesbian (Gomes et al., 2011; Knijnik & Vasconcellos, 2003; Ventura & Hirota, 2007). The sport environment expands this dual stereotyped perception that men are naturally masculine and women naturally feminine. Throughout history, sports alternatives for women to practice considering their morphofunctional specificities were has always been concerned (Adelman, 2007). Women have already been banned from some sports practices, for reasons such as body traits and cultural stereotypes that insisted that sports environments strengthened the male warrior spirit (Hult, 1994). Thus, culturally, females are disqualified as women who have lost their essence or who have changed their social roles. In Brazil, perception about female athletes in soccer/futsal (Bandeira & Seffner, 2013; Lobato et al., 2020) and combat sports also refers to them as lesbian women and masculine gender identity (Moura et al., 2010).

National (Cardoso et al., 2017) and international (Burns & Mahalik, 2007; Butow et al., 2000) studies have demonstrated the importance of investigating psychological gender profiles, since they influence the personal relationship of individuals, adherence to sports practice and the probability of certain diseases - this is because personality traits always influence our attitudes and behaviors. In light of the evidence and issues presented, the hypothesis of this study was that women in culturally masculine sports do not predominantly identify themselves as lesbians (homosexuality, sexual orientation), masculine (gender identity) nor have a psychological gender profile as masculine heteroschematic. This study aimed to assess sexual orientation, gender identity and the psychological gender profile of women practicing culturally masculine sports (futsal, soccer, and combat sports) in an attempt to clarify the relationship between the three gender constructs (sexual orientation, gender identity and psychological gender profile), then to compare sports (soccer, futsal and combat sports) in relation these three constructs.

Method

This research is characterized as an observational, descriptive and comparative study with a cross-sectional design, in which female athletes, practicing sports considered culturally masculine (Bandeira & Seffner, 2013; Lobato et al., 2020; Moura et al., 2010), such as futsal, soccer and combat sports (jiu-jitsu, muay thai, and judo) participated in a non-probabilistic

way. Self-assessment of the participants was evaluated through questionnaires, approved by the Ethics Committee on Human Research - UDESC, under the approval protocol 275.381 (CAAE 14829113.2.0000.0118). Available data (Melo, Silva, Alves, Cerqueira and De Carvalho, 2019).

Participants

A total of 193 women participated in the study, with a mean age of 22.80 ± 5.38 years, with 111 (58,11%) undergraduate or graduated, practitioners in sports considered culturally male, such as soccer ($n = 65$; 33.68%), futsal ($n = 49$; 25.39%), and combat sports ($n = 79$; 40.93%), of which the majority were single ($n = 150$; 78.53%). The mean number of training sessions per week was 3.28 ± 1.38 days, with a duration of 114.82 ± 34.59 minutes, at moderate intensities (52.88%) according to self-declaration, details of sociodemographic statistic on table 1.

Instruments

Two questionnaires were collected to assess the intended variables. The first instrument was a sociodemographic profile as age, marital status, sexual orientation (1 - heterosexual, 2 - homosexual, 3 - bisexual), gender identity (0 - exclusively masculine, 1 - predominantly masculine, 2 - androgynous more masculine, 3 - androgynous, 4 - androgynous more feminine, 5 - predominantly feminine, 6 - exclusively feminine) modality practiced, training sessions (in days per week), training time (in minutes) and intensity (1 - low, 2 - moderate, 3 - high). The second instrument applied was the Female Inventory of the Self-Concept Gender Schema (IFEFGA), used to classify the athletes according to psychological gender profile. The instrument is composed of 75 items grouped into factors that make up the masculine schema and the feminine schema and was elaborated and validated by Giavoni and Tamayo (2005). Items measure distinct dimensions of gender schema on an ordinal scale of five categories, the IFEFGA evaluates three dimensions of the masculine schema (reliability for this study, audacity, $\alpha = 0.82$; egocentrism, $\alpha = 0.88$; and negligence, $\alpha = 0.77$) and three female schema dimensions (reliability for this study, sensuality, $\alpha = 0.85$; inferiority $\alpha = 0.84$; and social adjustment, $\alpha = 0.76$). The instrument can assess the psychological profile of individuals in those dimensions according to masculine schema and feminine schema. It enables a classification of typological groups of gender schemas: in masculine heteroschematics, those women who prevail in masculine to feminine schemas, feminine heteroschematics, those who prevail in feminine to masculine schemas, and isoschematics, those women that present a balance between the schemas.

To establish the classification of psychological gender profile in female athletes, the Interactive Model (Giavoni & Tamayo, 2010) was used. Must follow all steps for each sample, first, the dimensions of masculine and feminine schemas are calculated by mean of items. After, to calculate the norms, the equations were as follows:

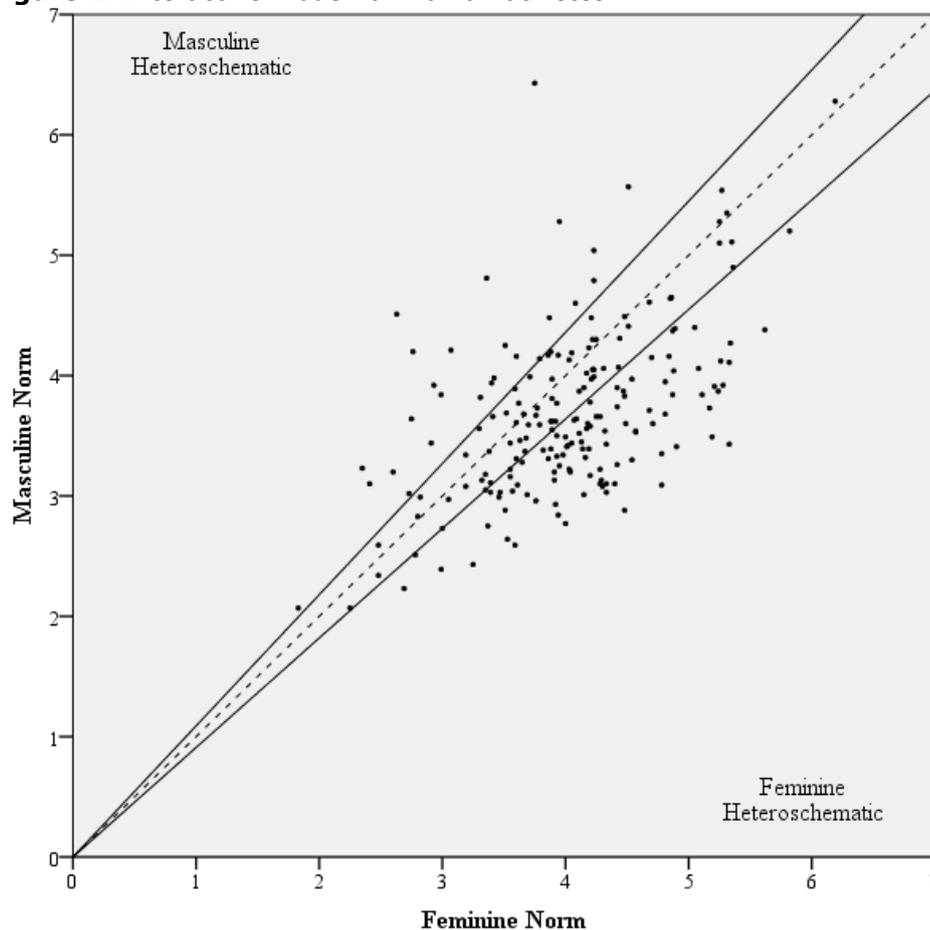
$$\text{Masculine Norm} = \sqrt{(\text{Audacity})^2 + (\text{Egocentrism})^2 + (\text{Negligence})^2};$$

$$\text{Feminine Norm} = \sqrt{(\text{Sensuality})^2 + (\text{Inferiority})^2 + (\text{Social Adjustment})^2}.$$

The division of Masculine Norm (MN) by Feminine Norm (FN) allows to find an angle within Cartesian plane with masculine norm as Y axis and feminine norm as X axis. Consequently, the bisector, 45° , is considered the most interaction between both norms. The deviation is founded by subtracting the angle of each participant by bisector (deviation = $45^\circ - \text{angle}$) (Giavoni, 2000; Giavoni & Tamayo, 2010).

Then, to identify the angle that differentiates typological groups of gender schemas is necessary to calculate for each sample, the paired t test to verify from which angle there is no difference between masculine and feminine norms (Giavoni, 2000; Giavoni & Tamayo, 2010). For this sample, no difference was found ($t(70) = -1.82$; $p = 0.07$) between the masculine norm ($n = 71$; 3.88 ± 0.70) and feminine norm ($n = 71$; 3.92 ± 0.69) with the deviation between -2.58° and 2.58° (angles between 47.58° and 42.42°). Then, participants who have a deviation between these values will be considered isoschematic, those who have a deviation greater than 2.58° will be considered feminine heteroschematic and those who have a deviation less than -2.58° will be considered masculine heteroschematic. The Figure 1 illustrate the interactive model for this sample.

Figure 1. Interactive model for woman athletes



Procedures

Initially, it was contacted federations, teams, and coaches regarding the possibility of data collection with their athletes. After permission from the responsible, the first contact with participants was at their training location, in a private room that was individually collected. Subsequently, the objective of the study was explained and if permission was given for data collection, the athletes were requested to sign the term agreeing to participate. Data were collected over approximately two months. They answered the instruments and put it in an envelope without any type of identification. Filling to the instruments took, on average, 20 minutes.

Data analysis

For the evaluation of the descriptive data of the sample, it was used means, standard deviations, and relative and absolute frequencies. Egocentrism and negligence dimensions of masculine schemas, inferiority and social adjustment dimensions of feminine schemas show non-normality by Shapiro-Wilk test. For the inferential analyzes sports were grouped into soccer, futsal and combat sports (jiu-jitsu, muay thai, and judo), and gender identity was grouped in masculine (0, 1), androgynous (2, 3, 4) and feminine (5, 6). It was used the Chi-squared test to verify associations between categorical variables (sexual orientation, gender identity, psychological gender profile, sports), Cramer's V as effect size (0.2 = small; 0.5 = medium; 0.8 = large (Fritz et al., 2012), and it was used ANOVA with Scheffe post hoc, for parametric dimensions and Kruskal-Wallis test with Dunn's post hoc for non-parametric dimensions, to determine whether or not there difference between sports, η^2 (eta square) as effect size (0.2 = small; 0.5 = medium; 0.8 = large (Fritz et al., 2012). All data were analyzed using the software Statistical Package for the Social Sciences for Windows, version 22.0, properly registered. The level of significance adopted was $p < 0.05$.

Results

The frequencies that describe women regarding sexual orientation, gender identity and the psychological gender profile are shown in Table 1. It can be noticed that the great majority of the participants self-assessed themselves as heterosexual and androgynous women. Regarding psychological gender profile of the participants, it can be observed that most prevalent profile is feminine heteroschematic, followed by isoschematic, and finally, masculine heteroschematic.

Table 1. Demographic statistics of participants

Categorical Variables	n	%
Sexual Orientation (n = 190)		
Heterosexual	141	74.21
Lesbian	31	16.32
Bisexual	18	9.47
Gender Identity (n = 191)		
Feminine	89	46.60
Androgynous	99	51.83
Masculine	3	1.57
Psychological Gender Profile (n = 193)		
Feminine Heteroschematic	102	52.85
Isoschematic	66	34.20
Masculine Heteroschematic	25	12.95
Marital Status (n = 193)		
Single	150	78.53
Married	24	12.57
Divorced	4	2.09
Others	13	6.81
Modality Practiced (n = 193)		
Soccer	65	33.68
Futsal	49	22.39
Combat Sports	79	40.93
Jiu-Jitsu	32	16.58
Muay-Thai	2	1.03
Judo	45	23.32
Education (n = 193)		
Elementary School	17	8.90
High School	63	32.98
Undergraduate	99	51.83
Postgraduate	12	6.28
Continuous Variables	range	\bar{x} (sd)
Age (years; n = 193)	16-47	22.80 (5.38)
Training sessions (days; n = 193)	1-7	3.28 (1.38)
Training duration (minutes; n=193)	30-360	114.82 (34.59)

Note: n - absolute frequency; % - relative frequency; \bar{x} = mean; (sd) = standard deviation

Table 2 depicts distribution of sexual orientation, gender identity and psychological gender profile. It was observed that there was no significant association between the groups. Those results suggest that among masculine heteroschematic women, psychological gender traits are not related to sexual orientation nor gender identity.

Table 2. Distribution between sexual orientation, gender identity and psychological gender profile

		Sexual Orientation			x ² (4) p- value	Cramer's V
		Heterosexual n (%)	Lesbian n (%)	Bisexual n (%)		
Psychological Profile	Gender					
Feminine heteroschematic		83 (58.87)	13 (41.94)	6 (33.33)	6.616 0.158	0.132
Isoschematic		43 (30.50)	13 (41.94)	8 (44.45)		
Masculine heteroschematic		15 (10.64)	5 (16.12)	4 (22.22)		
		Sexual Orientation			x ² (4) p- value (adj)	Cramer's V
		Heterosexual n (%)	Lesbian n (%)	Bisexual n (%)		
Gender Identity						
Feminine		64 (45.71)	15 (50.00)	9 (50.00)	6.455 0.160	0.131
Androgynous		75 (53.57)	13 (43.33)	9 (50.00)		
Masculine		1 (0.72)	2 (6.67)	0		
		Gender Identity			x ² (4) p- value (adj)	Cramer's V
		Feminine n (%)	Androgynous n (%)	Masculine n (%)		
Psychological Profile	Gender					
Feminine heteroschematic		54 (60.67)	47 (47.47)	1 (33.33)	9.184 0.062	0.155
Isoschematic		30 (33.71)	34 (34.34)	2 (66.67)		
Masculine heteroschematic		5 (5.62)	18 (18.18)	0		

Note: n – absolute frequency; % – relative frequency; x² – Chi-squared, adj – Monte Carlo method adjustment.

Sexual orientation was associated with the sports practiced by the participants, with a high presence of lesbian women in soccer and bisexual women in futsal, while heterosexual women more present in combat sports. Table 3 presents details of these data. Sports also was associated with gender identity, it shows that women in these sports there are no identity as predominantly masculine, but they recognize some typical masculine behavior (Table 3). On the other hand, psychological gender profile showed no predominance across sports (Table 3).

Table 3. Relationship between sports and sexual orientation of athletes

Sport	Sexual Orientation (adj)			x ² (4) p-value	Cramer's V
	Heterosexual n (%)	Lesbian n (%)	Bisexual n (%)		
Soccer	39 (27.66)	19 (61.29)	6 (33.33)	40.242 <0.001*	0.325
Futsal	28 (19.86)	8 (25.81)	12 (66.67)		
Combat Sports	74 (52.48)	4 (12.90)	0		
Sport	Gender Identity			x ² (4) p-value (adj)	Cramer's V
	Feminine n (%)	Androgynous n (%)	Masculine n (%)		
Soccer	41 (46.06)	23 (23.23)	0	13.610 0.005*	0.189
Futsal	21 (23.60)	26 (26.26)	1 (33.33)		
Combat Sports	27 (30.34)	50 (50.51)	2 (66.67)		
Sport	Psychological Gender Profile			x ² (4) p-value (adj)	Cramer's V
	Feminine Heteroschematic n (%)	Isoschematic n (%)	Masculine Heteroschematic n (%)		
Soccer	32 (31.37)	26 (39.39)	7 (28,00)	2.158 0.600	0.074
Futsal	25 (24.51)	16 (24.24)	8 (32.00)		
Combat Sports	45 (44.12)	24 (36.36)	10 (40.00)		

Note: n – absolute frequency; % – relative frequency; x² -- Chi-squared, adj – Monte Carlo method; * significant

Regarding the masculinity and femininity dimensions of women related to diverse sports, it can be observed that audacity and social adjustment are well developed for most modalities, whereas egocentrism, negligence, and inferiority are poorly developed (Figure 1). Comparing sports (Table 4) with the masculinity dimensions, audacity obtained the highest score in soccer, whereas futsal and combat sports showed the lowest. For egocentrism, no significant difference was observed. Negligence showed the lowest scores among soccer and combat sports and futsal were the highest.

Table 4. Comparison of masculinity and femininity dimensions between sports

	Sports			F (df)	p-value	Effect size
	Soccer (65) \bar{x} (sd)	Futsal (49) \bar{x} (sd)	Combat Sports (49) \bar{x} (sd)			
Masc. Aud. ^a	2.99 (0.46)	2.73 (0.56)	2.74 (0.51)	5.44 (2)	0.005*	0.233
Fem. Sen.	2.14 (0.76)	2.10 (0.74)	2.24 (0.72)	0.664 (2)	0.516	0.083
	\bar{x} (sd) mean rank	\bar{x} (sd) mean rank	\bar{x} (sd) mean rank	H (df)	p-value	Effect size
Masc. Ego.	1,37 (0.80) 85.90	1.74 (0.80) 11.62	1.53 (0.80) 97.06	5.933 (2)	0.051	0.03
Neg. ^b	1.26 (0.74) 82.04	1.72 (0.83) 113.54	1.51 (0.82) 99.05	9.097 (2)	0.011*	0.046
Fem. Inf. ^c	1.33 (0.55) 83.00	1.68 (0.72) 110.92	1.53 (0.71) 99.89	7.345 (2)	0.025*	0.037
Soc.	3.00 (0.59) 106.87	2.80 (0.56) 87.05	2.91 (0.56) 95.05	3.689 (2)	0.158	0.019

Note: \bar{x} = mean; (sd) = standard deviation; Masc. = Masculine dimension; Aud. = Audacity; Ego. = Egocentrism; Neg. = Negligence; Sen. = Sensuality; Inf. = Inferiority; Soc. = Social Adjustment; F = ANOVA; H = Kruskal-Wallis. ^a Post hoc, Soccer > Futsal (t(112) = 2.732; p-value = 0.007; r = 0.250); Soccer > Combat Sports (t(142) = 3.074; p-value = 0.003; r = 0.250); ^b Post hoc, Futsal > Soccer (U = 1071; p = 0.003; r = 0.28); ^c Post hoc, Futsal > soccer (U = 11; p = 0.008; r = 0.248).

Looking at the femininity dimensions (Table 4), sensuality and social adjustment did not present differences between sports. The inferiority dimension demonstrated a difference between soccer with lower scores than futsal.

The frequencies that describe women regarding sexual orientation, gender identity and the psychological gender profile are shown in Table 1. It can be noticed that the great majority of the participants self-assessed themselves as heterosexual and androgynous women. Regarding psychological gender profile of the participants, it can be observed that most prevalent profile is feminine heteroschematic, followed by isoschematic, and finally, masculine heteroschematic.

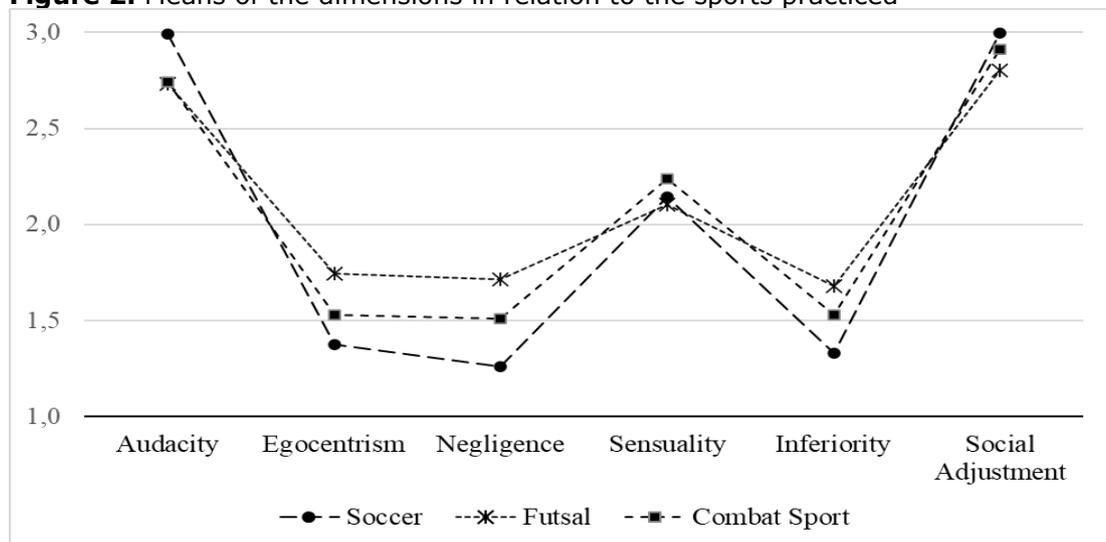
Table 2 depicts distribution of sexual orientation, gender identity and psychological gender profile. It was observed that there was no significant association between the groups. Those results suggest that among masculine heteroschematic women, psychological gender traits are not related to sexual orientation nor gender identity.

Sexual orientation was associated with the sports practiced by the participants, with a high presence of lesbian women in soccer and bisexual women in futsal, while heterosexual women more present in combat sports. Table 3 presents details of these data. Sports also was associated with gender identity, it shows that women in these sports there are no identity as

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Regarding the masculinity and femininity dimensions of women related to diverse sports, it can be observed that audacity and social adjustment are well developed for most modalities, whereas egocentrism, negligence, and inferiority are poorly developed (Figure 2). Comparing sports (Table 4) with the masculinity dimensions, audacity obtained the highest score in soccer, whereas futsal and combat sports showed the lowest. For egocentrism, no significant difference was observed. Negligence showed the lowest scores among soccer and combat sports and futsal were the highest.

Figure 2. Means of the dimensions in relation to the sports practiced



Looking at the femininity dimensions (Table 4), sensuality and social adjustment did not present differences between sports. The inferiority dimension demonstrated a difference between soccer with lower scores than futsal.

Discussion

The objective of this study was to assess sexual orientation, gender identity and the psychological gender profile of women practicing culturally masculine sports, then to compare sports in relation to these constructs. It is evident in this study that these women practicing culturally masculine sports predominantly perceive themselves as heterosexual in sexual orientation, and androgynous in gender identity, and classified in the psychological gender profile as feminine heteroschematic. Thus, the results could call into question the popular association between lesbian and women practicing sports considered masculine. It is relevant to show that for this women, sexual orientation, gender identity and psychological gender profile there are no association, despite the gender identity and psychological gender profile there are related to biological sex, women are expected to be more feminine and feminine heteroschematic and predominantly heterosexual (Bártová & Valentová, 2012; Cardoso & Sacomori, 2012; Giavoni, 2000; Giavoni & Tamayo, 2005).

Despite being perceived as having a masculine gender identity (Cardoso & Sacomori, 2012), athletes identified themselves as androgynous, that is, they perceive themselves with as some characteristic of masculinities. According to Cardoso, Silveira, Zequinão, Martins and Souza (2009) and Kauer and Krane (2013), the characteristics of supposedly masculine sports that demand sweat, physical exertion, rivalry, exalted muscles, and aggressive gestures of the body, raise questions about the sexual identities of women practitioners. Accordingly, stereotype that women practicing male sports are lesbians continues to prevail in society, perpetuated by prejudice and social discrimination (Cardoso, Martins, Fávero, Silveira & Souza, 2009; Paim & Strey, 2008). Nonetheless, the results of the present study suggest that women who engage in these culturally masculine sports (soccer, futsal and combat sports) are not predominantly lesbian, masculine nor masculine heteroschematic.

About the psychological gender profiles women was classified as feminine heteroschematic. These results are consistent with the findings of Capparelli (2014), who investigated 27 federal police officers from the state of Goiás who presented female heteroschematic and isoschematic profiles, even though being a police officer is a culturally masculine profession. Women who practice culturally masculine professions or sports could not imply masculinity in their predominant self-concepts.

Soccer and futsal showed greater concentration of lesbian and bisexual women. Cardoso, Silva, Medeiros and Ferrari (2019) proposed sports orientation based on two dimensions: collision and contact nature of sports called *embaticidade*, in Portuguese (there is not word in English for this), and expression and rhythm called by rhythmicity, which could explain the sporting preferences of men and women in Brazilian context. In the present work, the athletes with a homosexual orientation also seem to have a sports orientation for collision and contact nature, which is usually present in sports considered socially masculine, although soccer and its variations seem to attract more lesbian and bisexual orientation among Brazilian women.

In soccer, futsal and combat sports can be observed feminine heteroschematic, masculine heteroschematic, and isoschematic women. The few studies that have investigated the psychological gender profile among athletes (Gomes et al., 2011; Medeiros, Ferrari & Cardoso, 2014) observed that the prevalent profile in athletes, regardless of biological sex, is the isoschematic profile, which represents an ideal psychological balance of gender for the different contexts of the modalities, although women in this study had more feminine heteroschematic profile.

This stereotype needs to be overcome within Physical Education, mainly because it is the only environment where it is possible to experience a great wealth of physical, motor, and rhythmic activities important for the development of children. If society engages us in the traditional gender stereotypes, limiting us in terms of development, a good Physical Education class is one of the few spaces where it could be offered without discrimination and prejudice (Cardoso, 2008a).

The results referring to the dimensions of masculinity and femininity have shown that some of them are characteristic for the practices of certain modalities, characterized with socially masculine, such as audacity (masculinity) and social adjustment (femininity). Audacity as a general characteristic is based on the daring pursuit of the new and unusual, satisfaction with goals, targets, and individual pleasure, which focuses on the ability to accept new challenges in the pursuit of originality and leadership and the use of reason with practicality, objectivity, determination, and logic (Giavoni & Tamayo, 2005). Thus, it can be understood why women would seek these modalities, if they have in their self-concepts a great capacity to risk new paths and seek the satisfaction of their desires without considering other factors such as barriers to reach their goals, and in this case could break down gender barriers to practice sports that bring them pleasure. Can also explain why soccer has a higher concentration of homosexuals, since it is in the sport that has the highest levels of audacity.

The social adjustment dimension assesses the principles and values of the *self* with respect to social behaviors; proposing to measure individual values that conform to social norms, such as morality, loyalty, fidelity, honesty, and responsibility, as well as collectivist values, such as concern for the well-being of others, sensitivity, and sharing of pain and suffering of others (Giavoni & Tamayo, 2005). This dimension characterizes these women as conforming to social behaviors, with a high capacity to put themselves in the other's place, and to understand social norms, but without grasping or understanding the sports studied here as deviants of social behaviors related to women. The combination of these factors may provide an idea of how self-concept can help in understanding certain behaviors, and factors that can influence engagement in them, as well as the low expressiveness of dimensions such as egocentricity the opposite of social adjustment, (focuses the self as the center of all interest; a love so exclusive to you that it ends up implying the subordination of the interests of others to your own (Giavoni & Tamayo, 2005)), negligence (Disorganization, carelessness of image and physical appearance, neglect of objects, neglect of important matters and laziness (Giavoni & Tamayo, 2005)), and inferiority (it is concerned with dependence on the opinions and expectations of others; as well as inflate cunning behaviors resulting from the feeling of inferiority (Giavoni & Tamayo, 2005)).

Conclusion

The heterosexual sexual orientation, androgynous gender identity and the feminine heteroschematic psychological gender profile were more found in female athletes in sports socially considered masculine. However, it was clear that, in this sample, there was no relationship between the sexual orientation, gender identity and the psychological gender profile. Although commonly stereotyped by the perception of widespread views, the evidence found in this research highlights other possibilities. The results also allowed to conclude that gender schemas of self-concept, gender identity and sexual orientation in female athletes who practice sports culturally considered as masculine sports are not associated but may partially explain the preference of some women for soccer and futsal.

It should be noted that, in Brazil, there is a social belief that every woman with a masculine heteroschematic profile is lesbian, so every woman who practices masculine sport activities would be a lesbian, but findings of this paper points to different directions. Most women who declared themselves lesbian in the sample are concentrated in soccer and futsal. Nevertheless, this study fails to explain this preference for soccer by lesbian and bisexual female athletes. A hypothesis of sports orientation and feminine and masculine dimensions of gender schemas of self-concept are presented; however, it deserves further investigation. This perspective grades personality traits according to sport characteristics, which would explain the greater interest of lesbian and bisexual women to collision and contact nature sports.

As limitations of this study are presented the heterogeneity of the number of participants in each chosen sport which did not allow further analysis within sports, the presence of only masculine sports, and better detail on the classification of sports. Future studies are suggested that include psychological aspects, as well as a more diversified sample in terms of a greater number of modalities culturally considered masculine, neutral, and feminine.

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