

Body image in women practicing yoga or other forms of fitness

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Summary

Aim of the study: The aim of the study was to compare the body image of women practicing yoga and other forms of fitness.

Subject or material and methods: 112 adult women practicing group forms of fitness (yoga – group A, other – group B) were examined using: Body-Esteem Scale (BES), Figure Rating Scale (FRS), The International Physical Activity Questionnaire (IPAQ).

Results: High scores in the IPAQ were present in the majority of both group and the difference between groups was not statistically significant. In all the subscales of BES (sexual attractiveness, weight concern, physical condition) high scores predominated in group A, and low in group B. Differences between the groups were statistically significant for each subscale of BES ($p < 0,01$). In FRS, group A achieved lower score for the current silhouette as well as for an ideal silhouette. A statistically significant difference was observed in the current silhouette ($p < .,001$).

Discussion: Physical activity influences the body image, but the specific result may depends on form of this activity.

Conclusions: Women practicing yoga have greater body esteem, less discrepancy between the real and the ideal silhouette and perceive their current silhouette as better in comparison to women practicing other forms of fitness.

body image, fitness, yoga, psychological activity

Group activities play an important role in fitness due to their comprehensive effect on the human body. An important advantage of this form of exercise is that, as a result of interaction between group members, it stimulates emotions and motivation [1]. Group physical activities promote such health benefits as increased immunity and reduced risk of cardiovascular, metabolic, cancer and musculoskeletal diseases [2]. Exercising

with others satisfies the need for belonging and social contact and helps develop the ability to work together [3].

FITNESS CLASSES

Fitness activities are defined as body–mind activities. They are performed mostly in groups. In addition to rebuilding muscle tissue and developing physical strength, endurance and coordination, they also take into account the psychological aspect: they are intended to reduce stress, improve mood, boost self-esteem and attractiveness. Basic features of fitness activities are: uni-

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versality, accessibility, comprehensiveness, lack of competitiveness and no need for special skills.

Among fitness classes offered by sports clubs in Poland the most popular are [4]: aerobics (exercises performed with music), ABT (exercises focusing on the abdomen, buttocks and thighs), BS (body sculpting – strengthening exercises modeling all muscle groups), TBC (total body conditioning – general exercises to improve overall fitness), step (stepper exercises performed with music), stretching (stretching all muscle groups), fit ball (exercises stabilizing and improving balance; exercise ball is used) and yoga.

Yoga is an ancient Indian educational, hygienic and therapeutic system which encompasses philosophy, physical exercises, breathing exercises, relaxation and hygienic guidelines [5]. Nowadays, yoga is practiced throughout the world, often only as a form of physical exercise (hatha yoga).

Hatha yoga is based on (slow or fast) smooth entry into an exercise pose (asana), its maintenance and exit from the pose. There are many varieties of hatha yoga and many of them combine poses with breathing. This form of exercise is very popular because of its benefits for physical, psychological and mental health [6]. The aim of hatha yoga is to unify the body, breath and mind. Great emphasis is placed on body consciousness or the ability to feel, locate and understand stimuli coming from the body, the physiological processes, muscle tension etc. Exercises are performed in a non-judgmental environment and focus on the empowerment of the body, which is important for well-being and self-esteem. Maintaining body awareness is also associated with the ability to shape one's body (shape, flexibility, strength, health, etc.) in a non-violent, gentle manner, taking into account its needs and abilities.

BODY IMAGE AND PHYSICAL ACTIVITY

Body image is a complex construct involving sensual image of the shape and size of the body as well as feelings regarding the whole body or its individual parts. The perceptions and beliefs about one's body (the cognitive aspect), as well as the emotional relationship to the body (the

emotional aspect) correspond to specific behaviors towards the body, including attempts to change its appearance or functioning (the behavioral aspect).

The basic factors that shape the body image include: physical factors (e.g. gender, race, weight and body shape, current and past illnesses and injuries), psychological aspects (e.g. personality), social environment (e.g. opinions of significant others about one's appearance) and culture (e.g. the predominant model of physical attractiveness, media influences) [7]. Body image serves as the basis for the development of physical identity. The consequence of this process is the overall image of the Self, which influences the psychophysical state, life activities and relations with other people. According to Stoke and Recascino, aspects of body image such as sexual attractiveness, physical fitness, body mass are the main determinants of happiness in women [8].

Body image disturbances most often involve a distorted perception of one's own body and negative attitudes towards the body. These problems are especially common in women [9,10]. Body dissatisfaction affects women's psychological condition and self-esteem and constitutes a risk factor for eating disorders as well as depressive disorders [11-13].

Research shows that physical activity has a positive impact on body image, especially if performed regularly. This applies to people of all ages [14], both healthy and with various physical limitations, such as obesity [15] or limb amputation [16]. Body image improves during physical activity, even when body weight and body shape do not change significantly [17]. However, what is most important is not the lifestyle-related activity in general, but exercise [18].

RESEARCH FOCUS

The present study focuses on the relationship between physical activity and body image in women. We were interested in the potential differences between various types of fitness classes and their effect on body image. A PubMed search of the years 1990–2016 yielded only a few reports comparing the impact of yoga and other forms of physical activity on body image. One concerns Polish and Canadian women [19], another

er concerns men [20], a further one focuses on women treated for breast cancer who performed aerobics with or without elements of yoga [21], and two more were small-number studies that compared mixed groups of healthy women and men [22, 23]. We found only one study in the general population of women [19].

We believe that our study may have implications for the prevention of body image disorders in women. It can also provide information about the use of specific forms of physical activity in the treatment of women suffering from body image disorders and eating disorder, which often coexist. This is very important because despite the fact that body dissatisfaction in the general population of women is frequent [24], many of these problems do not reach clinical level and are not diagnosed or treated.

We hypothesized that yoga as an activity deliberately raising body awareness promotes a more positive assessment of one's own body than other forms of exercise. The aim of our study was to compare body image in women practicing yoga and other forms of group exercise.

MATERIALS AND METHODS

Participants

We examined 140 adults participating in fitness classes. Inclusion criteria were: female gender, age over 18 years, taking part in group yoga or other forms of group physical activity at least 1 time per week for at least 1 month, and consent to participating in the study. Exclusion criteria were: irregular participation in yoga and other forms of group exercise, professional involvement or experience associated with increased body awareness (physical therapist, dancer, fitness instructor, personal trainer), self-declared eating disorders or other chronic diseases, no consent to participate in the study.

Having been informed about the study, all participants provided informed consent during baseline assessment. Participants did not receive any reward for participating in the study. In total, the study involved 112 women who met inclusion criteria and completed the study questionnaires. The study group was divided randomly according to the physical activity they

engaged in: group A – hatha yoga and group B – other (ABT, BS, TBC, aerobics, step).

Measures

The study was conceived as a diagnostic survey. We used four questionnaires: the Body-Esteem Scale (BES) Polish version [25,26], the Figure Rating Scale (FRS) [27], the International Physical Activity Questionnaires (IPAQ)-short version [30], and our own questionnaire.

- Body-Esteem Scale-Polish version

BES contains 35 items on body parts and bodily functions divided into 3 subscales, which for women are: Sexual Attractiveness (SA), Weight Concern (WC) and Physical Condition (PC). Participants assess their feelings on a scale from 1 to 5 (1 strongly negative, 5 strongly positive). The sum for each of the three subscales is then calculated. The questionnaire has Polish norms in sten scores, allowing for comparisons with the general population: low (stens 1–4), average (stens 5–6) or high (stens 7–10). The alpha coefficient for internal consistency is 0.78 to 0.87 for all three female subscales [25].

- Figure Rating Scale

The test includes nine silhouettes (male and female) that are numbered from 1 (very thin) to 9 (severely obese) [27]. Participants identify the silhouette similar to their current size and shape (CS) and also the silhouette they aspire to (IS). Body dissatisfaction is assessed by the difference between the ideal silhouette and the current silhouette. This measure has been used in many studies with acceptable reliability and validity [28]. The alpha coefficient for internal consistency of FRS is 0.75 [29].

- The International Physical Activity Questionnaires-short version

We used the Polish short version of the questionnaire [30]. It contains 7 questions concerning all types of physical activity associated with everyday life, work and leisure. Only those activities that were performed for at least 10 minutes without interruption are taken into account. The level of physical activity is calculated by multiplying the number of days in a week in which a physical activity was performed by time in minutes. The result is multiplied by a factor of Metabolic Equivalent of Work (MET)

appropriate for the activity (strenuous exercise – 8 MET, moderate physical activity – 4 MET, walking/strolling – 3.3 MET). Time spent resting is not counted. The sum of all scores for each activity is a measure of a weekly physical activity expressed in MET min/week. The result is classified into one of three categories defining the level of physical activity: low (< 600 MET min/week), medium (600 – 1500 MET min/week) and high (>1500 MET min/week). The alpha coefficient for internal consistency of IPAQ is around 0.8 [31].

- The study questionnaire

It consists of three questions about the participant's fitness regime: type, frequency and duration. Two questions about height and weight allowed for the subsequent determination of body mass index (BMI) according to the formula: weight (kg) / height (m)². Six questions about sociodemographic data and health status were also included.

RESEARCH

The study was conducted in the period from 1 March to 30 April 2015 at several fitness centers in Bielsko-Biala, Poland. Some of them specialize in hatha yoga, whereas others are typical fitness clubs. All clubs agreed for the researchers to carry out the survey. Surveys were distributed to participants at the beginning of a class. Participants were informed of the purpose of the study, that it was anonymous and that they were free to withdraw at any point. Each person received a set of four questionnaires. Participants completed the questionnaires in the club or at home,

and then left completed surveys at reception. There were no time limits to answer the questions. Surveys were distributed in all branches several times a week at different times in order to ensure random sampling. Surveys were collected from the clubs at the end of each week. The study was approved by a bioethics committee (CDF/0022/KB/133-1/14).

DATA ANALYSIS

Statistical analyzes were performed using STATISTICA 14.0. To evaluate the normal distribution we used the Shapiro–Wilk test. As most distributions were not normal, we decided to use nonparametric tests for all analyzes. In univariate analysis, we used Pearson chi² test and Mann–Whitney *U*-test for testing the significance of between-group differences, and Spearman's *r*-correlation coefficient to detect correlation characteristics. Statistical significance level was set at $\alpha < 0.05$.

RESULTS

Sample characteristic

The mean age was 35 years in group A and 33 years in group B. The average weight was 63 kg in group A and 65 kg in group B. The mean BMI was 22 kg / m² in group A and 23 kg / m² in group B. The mean duration of group exercise was 4 years in group A and 3 years in group B. The average number of hours per week spent on physical activity was 2 h in group A and almost 3 h in group B. Details are given in Table 1.

Table 1. Characteristics of the study group

Group	Variables	Mean	Min.	Max.	SD
A	Age (years)	35.10	24.00	60.00	7.94
	Height (m)	1.68	1.58	1.82	0.06
	Body mass (kg)	62.46	47.00	75.00	5.92
	BMI (kg/m ²)	22.05	18.59	25.05	1.43
	Years of activity	4.35	1.00	5.00	0.99
	Duration of physical activity per week (hours) (godziny)	2.32	1.00	7.00	1.36

B	Age (years)	32.51	18.00	59.00	9.55
	Height (m)	1.68	1.56	1.79	0.05
	Body mass (kg)	64.98	48.00	100.00	9.93
	BMI (kg/m ²)	23.00	19.26	37.18	3.51
	Years of activity	3.03	1.00	5.00	1.24
	Duration of physical activity per week (hours) (godziny)	2.60	1.00	6.00	1.39

In group A, the majority of respondents had higher education, while in group B the same number of people had higher and secondary education. In both groups, the majority was in

employment, including highly skilled work. The majority of both groups lived in urban areas and declared being in a relationship. Details are shown in Table 2.

Table 2. Demographic characteristics of study groups

Variables		Group A		Group B	
		N	%	N	%
Education level	Primary	0	0.00	1	2.00
	Vocational	5	9.00	3	5.00
	Secondary	17	30.00	26	46.00
	Tertiary	34	61.00	26	46.00
Professional status	Student	2	4.00	12	21.00
	Low-skilled work	8	14.00	12	21.00
	Highly skilled work	40	71.00	28	50.00
	Unemployment	1	2.00	1	2.00
	Other	5	9.00	3	5.00
Place of residence	City	45	80.00	46	82.00
	Village	11	20.00	10	18.00
Relationship status	Single	20	36.00	22	39.00
	In a relationship	36	64.00	34	61.00

Group homogeneity

Statistical analysis showed no differences between the groups with respect to: age, body weight, BMI, time spent on exercise per week. The groups differed only with regard to length of physical activity: it was significantly longer in group A than in group B ($Z(110) = 5.27$; $p < 0.001$).

Subjects in groups A and B did not differ with respect to education, place of residence and part-

ner status. However, we observed a significant difference regarding professional status ($\chi^2(4) = 10,56$; $p < 0,05$). In Group B, there were more students and more low-skilled workers, contrary to group A.

The difference between the two groups with respect to IPAQ scores was not statistically significant. Detailed IPAQ results are shown in Table 3.

Table 3. Level of physical activity in the study group (IPAQ)

Group	Physical activity	N	%
A	Average	13	23.20
	High	43	76.80
B	Low	2	3.60
	Average	12	21.40
	High	42	75.00

Body esteem

In BES, group A had the following average scores on individual subscales: SA – M = 6.38, SD = 1.86; WC – M = 7.00, SD = 1.39; FA – M = 6.18, SD = 1.81. For group B the results were: SA – M = 5.09, SD = 1.90; WC – M = 4.93, SD = 2.12; and FA – M = 4.09, SD = 2.20. According to the norms for the Polish population, we transformed raw BES results into sten scores and as a result, we achieved the level of intensity of variables studied. On the subscale of sexual attractiveness (SA) most people within group A achieved a high score (57%), with 25% achieving moderate and 18% achieving a low score. In group B most participants achieved a low score (48%), 32% achieved a moderate score and 20% – high. On the WC subscale, group A mostly achieved a high score (63%), followed by moderate (36%) and low (2%). In group B low scores dominated (45%), followed by high (32%) and moderate (23%) scores. On the FA subscale, the majority of group A had high scores (45%), 36% had

moderate and 20% had low scores. In group B low scores again dominated (59%), followed by moderate (25%) and high (16%). Between-group differences on BES subscales were examined and the results are shown in Table 3. We observed significant differences between the groups on all BES subscales. Group A had higher scores than group B on each subscale.

Body perception

On the FRS, the average score for the CS subscale was M = 3.57 (SD = 4.25) in group A and M = 4.43 (SD = 6.34) in group B. The average score for the IS subscale was similar in both groups: M = 2.82 (SD = 4.23) in group A and M = 3.00 (SD = 4.15) in group B. The differences between the groups on the FRS are presented in Table 4. We found a significant difference between the groups on the CS subscale – group A participants had significantly lower scores than group B participants.

Table 4. Differences in body esteem and body perception between the two groups

Variables		Mean		Mann-Whitney test			
		Group A	Group B	U	Z	df	p
Body esteem (BES)	Sexual attractiveness (SA)	6.38	5.09	1028.00	3.14	110	< 0.010
	Weight concern (WC)	7.00	4.93	747.50	4.77	110	< 0.001
	Physical activity (PA)	6.18	4.09	741.00	4.81	110	< 0.001
Body perception (FRS)	Current silhouette (CS)	3.57	4.43	858.50	-4.13	110	< 0.001
	Ideal silhouette (IS)	2.82	3.00	1427.00	-0.82	110	0.365

Z = test statistic of Mann-Whitney U-test

U = difference between two rank totals

df = degrees of freedom

p = significance level

We also examined whether the groups differed in the degree of discrepancy between the

CS and IS. The difference was statistically significant ($\chi^2(4) = 23, 38, p < 0.001$). This means that

the discrepancy was smaller in group A than in group B. In both groups, there was no correlation between the BES and the FRS, but we observed a relationship between the duration of weekly physical activity, and the WC subscale in BES in group A ($R = 0.32$; $p < 0.05$) and the PA subscale of BES in group B ($R = 0.29$; $p < 0.05$).

DISCUSSION

By definition, fitness activities refer both to the physical and the psychological sphere. Their aim is to restore or maintain mental and physical well-being of the individual. The structure of group exercises is generally similar. Namely, the session begins with a warm-up, followed by main exercise and concluded with body relaxation and a return to the initial state. Exercises may focus on slightly different aspects, depending on the form of exercise. Traditional fitness activities such as aerobics are performed to music. Participants focus on correct execution of a specific sequence of movements in the rhythm imposed by the instructor. Awareness is thus oriented towards the outside and the feelings flowing from the body are secondary. In contrast, during a yoga session, participants' attention is focused inwards [32,33]. The focus is body posture, muscle tone, breathing but also thoughts and emotions that arise. The complexity of asanas is adapted to the participants' level and focuses on harmonizing their psychophysical state.

Various types of fitness activities are characterized by different degrees of focus on body awareness. In the present study, the hypothesis was that the type of activity differentiates the participants also in terms of perception of their own body. Our study showed that women practicing yoga versus other forms of group exercise differ in the level of body satisfaction in all three dimensions analyzed: sexual attractiveness, weight concern and physical condition. Sexual attractiveness is related to the perception of areas of the body whose appearance cannot be altered through exercise (e.g. satisfaction with the appearance of lips, breasts). Attitude towards these areas is also related to the emphasis placed on the appearance of body areas related to sexuality. Their modeling is done

mainly through cosmetic treatments (e.g. make-up). As regards weight concern, importance is accorded to those areas of the body whose appearance can be changed through physical exercise or diet. Overall fitness, in turn, concerns parameters such as endurance, strength and flexibility. Women practicing yoga showed a higher sense of sexual attractiveness, greater weight concern and a better overall fitness level.

In the PubMed database we did not find any reports that applied the Body-Esteem Scale to study differences between people who engage in different forms of physical activity. Other diagnostic methods, however, led various researchers to comparable results. For example, in the study by Daubenmier, women performing yoga or aerobics were compared with those not participating in either form of activity over the past two years. Factors affecting eating disorders were analyzed in women engaged in various forms of physical activity. Additionally, attitude towards one's body was studied as a mediating variable in eating disorders. The measures used were the Body Areas Satisfaction Scale, the Self-Objectification Questionnaire and Body Awareness Questionnaire. It was shown that women practicing yoga had greater body awareness and responsiveness to bodily sensations, lower self-objectification and greater body satisfaction than the other two groups [34].

Zajac & Schier compared groups of Polish and Canadian women practicing either yoga or aerobics. They used the Situational Inventory of Body Image Dysphoria to assess body image distress experienced in daily life situations such as activities related to personal care, eating, exercising, intimacy, physical self-focus, comparing oneself with others and appearance changes. They observed that the group of Polish women practicing yoga differed significantly from the Polish aerobics group, Canadian aerobics group and Canadian yoga group with regard to negative emotions towards the body experienced in the analyzed situations [19].

Taspinar and colleagues conducted a study involving 80 men and women between 20 and 40 years of age. They analyzed changes in body assessment during 7 weekly yoga workouts or resistance exercises. To assess the level of satisfaction with certain areas and functions of the body the researchers used the Body Cathexis Scale

(BCS). Yoga participants had higher scores of baseline body satisfaction compared with other participants, but both types of exercise improved body satisfaction. The results showed a slightly greater improvement in the group of resistance exercise; however, differences between the groups were not statistically significant with respect to both initial and final measurements [22].

Hafner-Holter compared gym exercise with yoga using the Body-Image Questionnaire. The questionnaire includes pairs of opposing adjectives describing the body, e.g. physically attractive vs. unattractive, energetic vs. not energetic, indifferent, cold vs. tender, loving. The author showed that the gym group reported reduced sexual discomfort, whereas people in the yoga group showed a reduction in somatization and body-related anxiety as well as an improvement in physical and emotional well-being. Thus, the author stated that physical activity improves general psychological well-being; however, gym exercise and yoga seem to have different psychological impacts [23].

The present study discovered a relationship between the level of body esteem and the frequency of exercise in both a yoga group and other exercise groups. More hours spent on fitness activities per week translated to higher scores on the Body-Esteem Scale. Other reports indicate, however, that these relationships are not clear. For example, Cash & Smolak show that in different life contexts in which the body plays a significant role (such as personal hygiene and body care, comparisons of appearance or physical fitness, eating, intimate situations, physical activity), negative emotions related to body evaluation can be triggered. Physical activity may therefore not fulfill the function of body image regulation if it interacts with an internal dialogue that generates negative emotions. It can even perpetuate distress and non-adaptive body image [7]. Body satisfaction may also be differently correlated with exercise frequency depending on the age of female study participants [35]. Moliver showed that in the case of women aged 45–80 years, exercise performed at least 2–3 times a week results in a better mood than less frequent exercise. In addition, frequent physical activity positively regulates emotions, which contributes to an increased satisfaction with their own bodies [36].

The type of motivation to exercise can also have an impact on body perception. If the goal is simply physical activity or weight reduction, then the increase in body satisfaction can be smaller. This also happens when physical activity is mandatory [37]. When the motivation to exercise is psycho-spiritual or mind-focused, then the increase in body satisfaction is significant [38]. This may be due to the existing relationship between the type of motivation to exercise and the choice of a particular form of exercise. Research shows that women who choose yoga are primarily interested in stress management and improved health, and women who choose aerobics are primarily focused on weight management [19].

The study showed that differences exist between the groups in terms of experience in practicing yoga or other forms of group exercise. Women practicing yoga had greater experience, which could also affect the level of satisfaction with their own bodies. This is supported by Lawlor, who showed that women with greater experience have greater satisfaction with their own bodies than those exercising for a shorter time [39]. As mentioned above, one of the reasons explaining greater experience in yoga groups can be motivation for physical activity. Generally, an important reason for exercising in women is the desire to reduce body weight and improve skin firmness. It is related to the ideal silhouette promoted by the mass media [40]. Because aerobic exercises performed to music are designed for large energy expenditure, they are likely to be chosen initially by people who want to reduce their body weight. However, due to the high intensity of those exercises and slow results they can be abandoned in favor of other slimming methods. Women practicing yoga tended to have more experience in exercise because they probably had a slightly different approach to their body. Accepting the premise of yoga – the relationship between body and mind – they assume that it takes time to achieve the desired results. Confirming these assumptions would obviously require a properly designed study estimating not only individual body images of participants engaging in various forms of exercise, but their relationship to the human body in general.

In addition to the form, frequency and length of exercise practice, an equally important dimension

of physical activity is its intensity. Because different intensity exercise may affect body image differently [41], our study compared a yoga group with other exercise group. The intensity of the overall physical activity during the past week was high and comparable in both groups.

The study also looked at the perception of both current and ideal silhouette. The yoga group perceived their current silhouette as leaner than the aerobics group. However, the perfect silhouette in both groups was similar and slimmer than the current perceived one. As a result, the yoga group reported a smaller gap between the current and ideal silhouette. Similar results, using the same method (the 9 silhouettes test), were obtained by Flaherty. He examined three groups of men – yoga beginners and advanced group, aerobics group and weight lifting group. Respondents were asked to indicate their current and ideal silhouettes, and the discrepancy between the two was then compared. There were no significant differences between the three groups regarding their current or perceived body shape, but groups differed in terms of their ideal body shape. The discrepancy between the ideal and the actual silhouette was biggest in the aerobics and weight lifting groups. Participants in these groups had significantly lower body satisfaction than men who practiced yoga, regardless of experience [20].

Another study found that in the case of women practicing yoga experience is important for the assessment of current and ideal body silhouette. Lawlor studied the relationship between yoga and satisfaction with body image and eating disorders. She compared women with extensive experience in yoga with less experienced women, using the Ideal-Body Stereotype Scale-Revised, the Physical Appearance Comparison Scale, the Body Areas Satisfaction Subscale of the Multidimensional Body-Self Relations Questionnaire and the Body-Image Ideals Questionnaire. She showed that women with more experience in yoga had less discrepancy between their current and ideal appearance [39].

Our study demonstrated a relationship between the form of group physical activity and body image. However, we did not study the direction of this relationship. It cannot be ruled out that the initial body image influences the choice of a form of exercise. For this reason and because

of the small size of study groups, our research should be considered as a pilot study. Subsequently, we plan to measure changes in body image due to participation in a planned intervention consisting of a set amount of time spent doing yoga or aerobics.

Another limitation of the study is a considerable age range of participants. Although all participants were adults, also in the psychological sense [42], the attitude towards one's body may change owing to developmental changes (e.g. menopause) and major life events (e.g. pregnancy). Therefore, in subsequent studies the age range should be limited, for example, to participants in the period before or after the menopause. Longitudinal research in risk groups is also of interest, for example among adolescent girls or girls with body weight below or above normal.

As mentioned earlier, the study groups were not homogeneous as regards the experience in respective forms of fitness. This must also be taken into account when planning the next study, which should monitor the impact of previous experiences of subjects engaging in a given form of exercise. In the present study, exclusion criteria included participation in both yoga and other forms of exercise. However, there is a possibility that individuals currently participating in yoga had engaged in another form of exercise before, and vice versa. This could have influenced the results obtained in terms of body image. This factor should be carefully analyzed and its possible impact reduced by more restrictive study group selection criteria.

Despite these limitations, the results are promising in terms of prophylaxis and treatment of psychiatric disorders, as confirmed elsewhere [43,44]. Yoga, by directing awareness to breathing and body sensations, can more effectively integrate experiences from the physical and mental realms than other forms of physical activity. This integration shapes the ability to self-regulate feelings, tensions and internal impulses, which is especially important for individuals suffering from body image disturbances and eating disorders.

CONCLUSIONS

We demonstrated that women practicing yoga have a greater body esteem and perceive their

current silhouette as better in comparison with women engaging in other forms of exercise. In addition, there is less discrepancy between the actual and the ideal silhouette in women practicing yoga. The results should be treated as tentative and a more thorough study should be planned involving a wide population of physically active women. Such studies may contribute to the prevention and treatment of body image disturbances and eating disorders.

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