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Body image assessment of fitness centers´ members & behavioral intentions: can we actually achieve members´ retention?

Evaluación de la imagen corporal de los miembros de los centros de acondicionamiento físico e intenciones de comportamiento: ¿podemos realmente lograr la retención de los miembros?

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Abstract. The concept of body image is multidimensional and concerns the attitude of each person towards their body and their appearance. The aim of this research was to study how Greek fitness center members evaluate their body image, and whether this evaluation is differentiated in terms of gender, age and BMI. Moreover, the study aimed to survey whether fitness center members' body image may predict their intention to maintain their fitness center membership. The research sample consisted of 220 adult members of fitness centers in a Greek city. For the needs of this research, the MBSRQ-Appearance scale was used (Cash, 2000), including 4 factors: i) *satisfaction with appearance* (7 items), ii) *investment in appearance* (12 items) iii) *anxiety with appearance and weight* (4 items) iv) *weight self-categorization* (2 items) and v) *satisfaction with body* parts (9 items). The MBSRQ has been previously adapted to a Greek population with satisfactory validity results. For the intention to continue participating in a fitness center, one question based on the Theory of Planned Behavior was used: *I will use the fitness center services again next year*. All responses were given on a five-point Likert scale. For the needs of this research, the questionnaire gathered additional demographic characteristics of the sample's gender, age and Body Mass Index (BMI). No statistical differences of the body image evaluation occurred depending on the sample's sex and age. Instead, differences emerged in the way members of the sample perceived their body image, and more specifically their "*Self-categorization of weight"* depending on whether they were classified as "normal" based on their BMI, "overweight" or "obese". As for the intention to continue their membership, it may be predicted by the *Satisfaction with body parts* factor. Attracting clients to fitness services should stop focusing on promoting a fit and flawless body, encouraging people who underestimate their body image to take advantage of their services.
Key Words: fitness centers, body image, customer intentions, fitness center members

Resumen. El concepto de imagen corporal es multidimensional y se refiere a la actitud de cada persona hacia su cuerpo y su apariencia. El objetivo de esta investigación fue estudiar cómo los miembros de los gimnasios griegos evalúan su imagen corporal y si esta evaluación se diferencia en términos de género, edad e IMC. Además, el estudio tuvo como objetivo encuestar si la imagen corporal de los miembros del centro fitness puede predecir su intención de mantener su membresía en el gimnasio. La muestra de investigación consistió en 220 miembros adultos de gimnasios en una ciudad griega. Para las necesidades de esta investigación se utilizó la escala MBSRQ-Appearance (Cash, 2000), que incluye 4 factores: i) satisfacción con la apariencia (7 ítems), ii) inversión en la apariencia (12 ítems) iii) ansiedad con la apariencia y el peso (4 ítems) iv) autocategorización del peso (2 ítems) yv) satisfacción con las partes del cuerpo (9 ítems). El MBSRQ se ha adaptado previamente a una población griega con resultados de validez satisfactorios. Para la intención de seguir participando en un gimnasio se utilizó una pregunta basada en la Teoría del Comportamiento Planificado: Volveré a utilizar los servicios del gimnasio el próximo año. Todas las respuestas se dieron en una escala Likert de cinco puntos. Para las necesidades de esta investigación, el cuestionario recopiló características demográficas adicionales de género, edad e índice de masa corporal (IMC) de la muestra. No hubo diferencias estadísticas en la evaluación de la imagen corporal según el sexo y la edad de la muestra. En cambio, surgieron diferencias en la forma en que los miembros de la muestra percibían su imagen corporal, y más específicamente en su "Autocategorización del peso" según fueran clasificados como "normales" en función de su IMC, "sobrepeso" u "obesos". En cuanto a la intención de continuar con su pertenencia, puede ser predicha por el factor Satisfacción con las partes del cuerpo. Atraer clientes a los servicios de acondicionamiento físico debe dejar de centrarse en promover un cuerpo en forma e impecable, y alentar a las personas que subestiman su imagen corporal a aprovechar sus servicios.
Palabras clave: centro fitness, imagen corporal, intención, miembros de centros fitness

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Introduction

Sports psychology scientists have repeatedly studied the concept of body image in relation to physical activity (Tiggemann & Williamson, 2000; Vani, Murray & Sabiston, 2021). It is a multidimensional concept that relates to how one perceives, feels and behaves in relation to their body and appearance (Cash, 2004; Cash & Smolak, 2011). There seems to be a strong association between sociocultural messages and body image. Studies show that idealized media images may increase negative affect such as body dissatisfaction and anxiety (Algars et al., 2009; Birkeland et al., 2005; Blanco Vega, et al., 2022; Halliwell, Dittmar, & Orsborn, 2007; Hargreaves & Tiggemann, 2004; Paquette & Raine, 2004) while personal body ideals are related to perceived cultural standards for thinness (Bessenoff & Snow, 2006). This seems to be the case in exercise services, as well, such as in fitness centers, where the promotion of an "ideal" body image, may increase anxiety rates (Prichard & Tiggemann, 2005).

Negative body image, expressed primarily as body dissatisfaction but also body shame, is associated with low self-esteem and depressive symptoms (Davison & McCabe, 2006; Neumark-Sztainer, Story, Hannan & Croll, 2006), low well-being (Field, Carmago, Taylor, Berkey, Roberts & Colditz, 2001) and development of unhealthy

eating behaviors and disorders (Neumark-Sztainer et al., 2006). Body dissatisfaction is expressed as a discrepancy between the actual and the ideal body, in terms of shape, size, height and weight (Grogan, 2017). Positive body image is a distinct and multifaceted concept and is related to loving, accepting and protecting the body and its functions, without showing narcissism or arrogance (Tylka & Wood-Barcalow, 2015).

There are many personal characteristics that relate to body image in sport and exercise settings. Gender is a fairly important factor in its development (Cash & Pruzinsky, 2002; Velasco-Santos, Pastor Pradillo, Blanco-Alcántara, & Jiménez Eguizábal, 2021), although recent studies show that body image seems relevant to all genders. Meta-analyses and reviews have indicated no consistent differences between men and women in their experiences of body image and exercise (Hausenblas & Fallon, 2006; Sabiston, Pila, Vani & Thogersen-Ntoumanie, 2019). Other researchers showed that women tend to be more preoccupied (Woodside et al., 2004) and dissatisfied with their bodies than men are (e.g., Davison & McCabe, 2005; Rozin, Trachtenberg, & Cohen, 2001; Franco, Tamburrino, Carroll & Bernal, 1988).

The nature of the dissatisfaction appears to be different, with women more often describing themselves as 'fat' or 'overweight', whereas in normal size they are not, while men tend to describe themselves as 'underweight', with objective measures (Furnham & Calnan, 1988). Also "dieting" is a more common behavior among women than men (Davis & Cowles, 1991). However, societal influences encourage different body image standards for boys/men and girls/women. Body standards for both sexes are constantly projected from various sources (e.g. family, friends, mass media and social networking) but also in various contexts (e.g. television, fitness centers, ads, social media, etc.). Western body standards prescribe women to be thin and men to be muscular with a V shape. Women are supposed to be slender and toned, but not muscular, while men are pressured to be muscular. In the sport and physical activity context, the ideal body being muscular aligns with the ideal male body but does not align with the ideal female body (Lunde & Gattario, 2017). Many people internalize these body standards and compare their own appearance to them. This, in some cases, results in the development of a negative body image (Tiggemann, 2011), exercise addiction (Martin & Racine, 2017) or the development of eating disorders (Bucchianeri & Neumark-Sztainer, 2014).

Age is another personal characteristic that is quite related with body image. It seems that as individuals progress across the lifespan, they experience more positive and less negative body image (Vani et al., 2021). In a review article on body image in adults, Tiggemann (2004) concluded that age naturally changes the body and its appearance, that body dissatisfaction seems to be relatively stable across the lifespan, and that body image becomes less important as adults age. However, Bennett, Hurd Clarke, Kowalski, and Crocker (2017) reported that adults of 65 and older also believe that fitness related aspects of body image are important. When studying adolescents, especially girls, they have described avoiding sport due to their appearance (Moreno-Murcia, Hellin, González-Cutre, & Martínez-Galindo, 2011) and wishing their appearance was different (e.g., taller, slimmer) so as to improve their functionality in their chosen sport (Porter, Morrow & Reel., 2013). Meanwhile, also for girls, the higher levels of body appreciation (positive body image) may predict an increase in physical activity (Andrew et al., 2016). Among young men and women, physical appearance has been described as a key motivator for engaging in physical activity (Sabiston, et al., 2019). For instance, in interviews with adolescent boys, they revealed that body dissatisfaction and negative body perceptions discouraged them from engaging in physical activity (Jachyra & Gibson, 2016). Conversely, older adolescents and young adults have described using physical activity as a behavioral response to experiencing body-related pride (Castonguay, Gilchrist, Mack, & Sabiston, 2013).

One other factor that seem to directly affect body image is the body mass index (BMI). BMI is a measure of an individual's weight in relation to his or her height. Body dissatisfaction naturally tends to be more common in overweight and obese individuals (Slevec & Tiggemann, 2011). Researchers indicate that higher BMI is associated with higher levels of body dissatisfaction (Eisenberg, Neumark-Sztainer, & Paxton, 2006; Van der Berg et al., 2007), body weight dissatisfaction (Neighbors & Sobal, 2007), and lower levels of body esteem (Wilson, Tripp, & Boland, 2005).

The relationship between body image and physical activity is complex, and understanding this interrelationship is key to improving the physical activity experience, increasing and sustaining sport and exercise behaviors across populations (Vani, et al., 2021). Body image and physical activity have a bidirectional relationship, meaning that one's positive or negative body image can influence their participation in physical activity, and one's participation in physical activity can influence their body image (negatively or positively; Sabiston Pila, Vani & Thogersen-Ntoumanie, 2019).

So, positive and negative body image is associated with numerous behavioral outcomes, including physical activity. Physical activity (including sport, exercise, and leisure pursuits) is a context where individuals often engage in social comparisons, are evaluated based on physical and functional features, and experience judgment from others based on their appearance and function. These aspects may contribute to experiences of negative body image. Yet, physical activity can also be an outlet where individuals experience mastery, enjoyment, and positive affect experiences, which can foster positive body image (Vani, Murray, & Sabiston, 2021).

Body image also appears to influence parameters, such as the preferred exercise location and exercise behavior.

Some appearance-related factors may also lead exercise participants to certain behaviors, as for example to avoid certain clothes, or avoid sports played in public places (Lantz, Hardy, Ainsworth, 1997). Fitness centers are an often preferred place to exercise (Tsitskari, Tzetzis & Batrakoulis, 2021), but it appears to be associated with greater concern about body image (Prichard & Tiggemann, 2005). They are places full of mirrors but also with images of people depicting the ideal body image. They are also places where people's bodies are exposed (e.g. tight and revealing clothing), which may lead to comparison with others (Focht & Hausenblas, 2004). In a qualitative study of twenty male student-members of fitness centers, it was found that they felt uncomfortable because of the social comparison with others in terms of body image. Thus, the fitness center emerged as a place in which members feel uncomfortable as they compare their body image with others and this causes significant stress (Lamarche, Gammage & Ozimok, 2018). On the other hand, there is also evidence that not all fitness centers members may be dissatisfied with their body image (Rossi & Tirapegui, 2018).

To date, most of the literature has been focusing on examining how physical activity is associated with lower negative and higher positive body image. Body image dissatisfaction, according to several studies, can be a barrier to exercise participation (Lantz, et al, 1997; Sabiston et al., 2019; Schuler, Broxon-Hutcherson, Philipp, Ryan, Isossari, Robinson, 2004), while according to Brudzynski and Ebben (2010) it is related to greater participation in exercise. Engaging in physical activity can have a significant impact on individuals' body image, self-esteem, and overall confidence throughout their lifespan (Buckworth, Dishman & Tomporowski, 2013; Hausenblas & Downs, 2013). It seems that individuals who have a positive perception of their body image are more likely to engage in physical activity than those with a negative body image (Campbell & Hausenblas, 2009; Hausenblas & Fallon, 2006). These body image concerns affect participants' intention to continue exercising (Lee, Choi & Bum, 2022)

There has been a lot of research on the factors that lead to customer loyalty and member retention in the fitness industry (De Knop, Hoecke & Bosscher, 2004; García Pascual, Alguacil, & Molina García, 2020; Tsitskari, Antoniadis & Costa, 2014; and others). Despite the declared importance of the fitness industry, there are indications that its services management, both internationally and in Greece, especially the management of customer relations and customers satisfaction, is deficient, leading to low retention rates (Avourdiadou & Theodorakis, 2014; Lagrosen & Lagrosen, 2007; Tsitskari & Batrakoulis, 2022; Tsitskari, Quick & Tsakiraki, 2014). Research has demonstrated perceived value (Brady et al., 2005; Yu et al., 2014), participants' involvement (Tsitskari, et al., 2014), exercise motives (Tsitskari, Tzetzis & Konsoulas, 2017), service quality (Alexandris, Zahariadis, Tzorbatzoudis & Grouios, 2004) and other parameters as strong predictors of customers' behavior. The body image factor does not seem to have been studied in the literature in relation to the members intention to continue participation.

The aim of this research was to study how Greek fitness center members evaluate their body image, and whether this evaluation is differentiated in terms of their demographics (gender, age, BMI). Finally, the study aimed to examine whether fitness center members body image may predict their intention to maintain their membership in the near future.

More specifically, the research hypotheses of the present study are summarized as follows:

H1: Sample members will be quite dissatisfied with their body image

H2: Men and women will evenly evaluate their body image.

H3: Body image will be better evaluated by elderly members of the sample than from the younger ones

H4: The higher the BMI the less the body image evaluation

H5: Body image may predict sample members' intention to continue being fitness centers' customers.

Methods

Sample-Data collection

The research sample consisted of 220 adult members of fitness centers (multi-functional and personal/group studios) in a Greek city. The majority of them were women (60.5%), aged 30-39 (38.2%), with a body mass index in the "overweight" range (47.3%) (Table 1).

The research was carried out on adult fitness centers' members in a city of South Greece. In the first stage, a member of the research team contacted all fitness centers' and fitness studios' managers and succeeded in getting permission from 18 of the 20 managers. The managers of the gyms had the option of using a link to fill out the questionnaires electronically, using printed questionnaires or a combination. The research has received the approval of the Ethics Committee of the Democritus University of Thrace. Data collection lasted from February to March of 2022. During that period, the utilization of fitness centers services was limited due to the implementation of appointment policies in multi-purpose gyms, as well. The total number of individuals participating in fitness programs, as observed in the sampled gyms, was not significantly high and should not exceed 1600 members. The absence of researchers at the fitness centers, due to Covid-19 restrictions, may have affected the response rate, resulting in a relatively low percentage of returned questionnaires estimated to be around 14% in relation to the total number of members at that time. The research objectives were not contingent upon having a representative sample, but rather on understanding how the particular sample perceived their body image and how this perception was influenced by demographic factors and affected their consumer behavior.

Questionnaires

To assess body image, the Multidimensional Body Self Relations Questionnaire (MBSRQ) was used, which contains subscales that can be studied separately or as a whole (Cash, 2000). For the needs of this research, the MBSRQ-Appearance Scales were used, including 4 factors: i) *satisfaction with appearance (with 7 variables, e.g. I like* my appearance as it is), ii) *investment in appearance* (with 12 variables, e.g. I *check my appearance in the mirror whenever I can*), iii) *anxiety with appearance and weight* (with 4 variables, e.g. I *am on a diet to lose weight*), iv) *weight self-categorization* (with 2 variables, e.g. I *think I am too thin.. I am too overweight*) and v) *satisfaction with body* parts (with 9 variables, e.g. *I am satisfied with my weight*) (Cash, 2000). The MBSRQ has been previously adapted to a Greek population with satisfactory validity ranging from 0.75 to 0.97 of the Cronbach alpha scale (Argyrides & Kkeli, 2013). All responses were given on a five-point Likert scale.

For the intention to continue participating in a fitness center, one question based on the Theory of Planned Behavior was used, according to the instructions of Ajzen and Madden (1986). Behavioral intention to participate was assessed through: *I will use the fitness center services again next year*. Responses were given on a five-point Likert scale ranging from 1 (not at all) to 5 (very much).

For the needs of this research, the questionnaire gathered additional demographic characteristics of the sample (gender, age). To estimate the Body Mass Index (BMI), self-reported data on weight and height were calculated (Villanueva, 2001). For the entire sample, the frequencies and percentage distributions of BMI according to the World Health Organization limits, were defined as follows: a) normal weight, BMI=>18.5-25 kg/m^2, b) overweight, BMI= 25 - <30 kg/m^2, and c) obesity, with DMS= >30 kg/m^2 (World Health Organization, 2000).

Data Analysis

The sub-scales' internal consistency was examined with Cronbach's alpha and item-total correlations. Descriptive statistics were performed, as long as Manova in order to test differences between i) sex, ii) age and iii) BMI of the fitness centers' as the independent variables and the body image evaluation, as the dependent one. Regression Analysis was performed in order to study whether fitness centers' members' intention to retain their membership may be predicted through their body image assessment.

Results

Demographics of the Sample

Descriptive analyzes were performed on the demographic characteristics of the sample (Table 1). Most members of the sample's fitness centers were women, aged 20-39, with less than 2 years of membership. Their mean body mass index, based on self-reports of weight and height, was M=29.22, SD=3.72.

Table 1.
Demographic characteristics of the sample

Sex (%)		Age (%)		Self reports of BMI (%)	
Men	39,1	≤ 19 years old	7,7	Normal weight	7,8
Women	60,5	20-29 years old	27,3	Overweight	47,5
		30-39 years old	38,2	Obese	44,7
		40-49 years old	16,4		
		≥50 years old	10,5		

Body image assessment of sample members & factors' reliability analysesThe internal consistency of the scales and sub-scales of the survey was calculated through Cronbach's alpha. The internal consistency of the factors of the Body Image rating scale, through the Multidimensional Body Self Relations Questionnaire (MBSRQ) (Cash, 2000), was moderate to low. The results of reliability analyses, as well as descriptive analyses, of the factors appear in Table 2.

Table 2.
Descriptives and Cronbach's a of the body image and the intention scales

Scale	Factors	α Cronbach	Mean	SD
Body image	Satisfaction with appearance	,835	3,67	0,78
	Investment in appearance	,816	3,27	0,68
	Anxiety with appearance and weight	,634	2,53	0,94
	Weight self-categorization	,832	2,85	0,69
	Satisfaction with body parts	,841	3,68	0,66
Intention	Intention to continue membership	-	3,77	1,17

The results show that the research participants rate both their body image as moderate to low, as well as their intention to remain members of the particular fitness center in the future.

Comparisons by sex, age and BMI classification.

An Independent Samples T-test was performed to determine any differences in the perceived body image of the sample members depending on whether they were male or female. No statistically significant gender differences emerged in any of the perceived body image factors. Accordingly, One-Way Anova Analysis was performed, with age as the independent factor and perceived body image as the dependent factors. Again, no statistically significant differences emerged.

Instead, differences emerged in the way members of the sample perceived their body image depending on whether they were classified as "normal" based on their BMI, "overweight" or "obese". More specifically, statistically significant differences emerged in the case of the factor "Self-categorization of weight ($F_{(2,\ 218)}$=25.284, p<.01). Subsequently, Scheffe post hoc tests were performed, from which it emerged that the members of the sample who, based on their BMI, are included in the "normal weight" category, evaluate the factor "Self-categorization of weight" lower (M=2.08, SD=.79) in relation to both those who belong to the "Overweights" (M=2.706, SD=.57) and those who belong to the "Obese" category (M=3.13, SD=.64). Accordingly, those who are "Overweight" rate this factor lower than the "Obese". Members of the sample have a relative objectivi-

ty in their self-categorization of their weight.

Regression Analysis

Regression analysis was performed with body image factors as independent variables and members' intention to continue participating in the fitness center as a dependent variable. The results revealed that overall only 5% of the total variance of the dependent variable was explained by the independent one. More specifically, only one dimension of the body image assessment scale, the *Body Parts Satisfaction* dimension, may predict members' intention to continue being fitness centers' members (B=.424, beta=.239, t=2.771, p<.05, ($F_{(5,218)}$ = 2.262, R =.225).

Discussion

The aim of this research was to study the body image of Greek fitness centers members. Moreover it aimed to examine whether body image differs among the samples' members, based on some of their demographic characteristics (gender, age, body mass index) and whether it can predict their intention to retain their membership in the near future.

Additionally, as part of the data collection, demographic characteristics collected showing that the majority of the research participants were women, aged 30-39 years. According to Tsitskari et al. (2021), men and women equally participate in fitness centers in Greece. The higher participation of women in the present research may be explained by either the general tendency of women to participate in researches (Curtin, Presser & Singer, 2000), or to a local characteristic of the fitness market, which naturally needs further investigation. The fact that the participants majority belong to the age group of 30-39 years is consistent with the recent data on the Greek fitness industry (Tsitskari et al., 2021). The membership penetration rate to the over 40 years old, and specifically over 50, is particularly low. This is worth considering by fitness center managers, in order to aim their services at new target groups. It is also interesting that the participation rate of members aged 20-29 years is relatively low compared to the Greek data (Tsitskari et al., 2021) and is not explained by the higher participation of young people in surveys (Moore & Tarnai, 2002). The regional fitness centers managers should probably consider the possibility of adding programs that correspond to younger and more competitive population groups, such as dynamic fitness programs, bouldering, etc.

The results of the descriptive analyzes of the body image dimensions revealed that the members of the surveyed fitness centers assessed them moderately to low, leading to the rejection of the first research hypothesis. More specifically, they rate the factors "*Appearance Anxiety*" (i.e. how much they worry about their weight), and "*Weight Self-categorization*" (i.e. whether they classify themselves as normal, overweight or obese, rather low). Given the results obtained from the self-categorization of their body mass index, and the fact that the majority of the sample members belong to the "overweight" category, their self-categorization is not objective. They seem to self-categorize their weight as medium to low (M=2.85, SD=.69) and not to be particularly anxious about their appearance (M=2.53, SD=.94).

At the same time, they moderately evaluate *satisfaction with their appearance*, *investment in appearance* and *satisfaction with body parts*, evidence that indicates they have neither a positive nor a negative perception of their appearance. According to Math and Cash (1997), body image represents the way in which people think, feel, and behave about their physical characteristics. Members of this sample, who are already members of fitness centers, appear to have a moderate perception of their body image, which is partially consistent with their self-categorization of their weight and body mass index. Since the respondents were mainly people aged 30-39, the results find a logical explanation, as some researchers (e.g. Webster & Tiggemann, 2003) have pointed to the decline in the importance one attributes to appearance over the adult life span, arguing that this may serve as a buffer against the ill-effects of appearance concerns.

The members of the sample fitness centers rated moderately their intention to continue their membership. This confirms once again the deficiency in the fitness centers' service management, especially in its marketing strategies, the management of customer understanding and relations (Lagrosen & Lagrosen, 2007; Tsitskari & Batrakoulis, 2022; Tsitskari, et al., 2021), and probably the members' feeling of the exercise result they achieve. All the above lead to the need for the development of strategies that would retain the fitness centers' customer base. The study's results should give a significant boost to customer retention actions, from the business side, investing in quality (Avourdiadou & Theodorakis, 2014; Ortega-Martínez, Lourenço-Martins, González-Víllora, & Campos, 2020; Tsitskari et al, 2017). Moreover, fitness businesses should invest in members' systematic guiding both during their exercise program but also in helping them choose the exercise program that suit them best, in order to gain the best possible exercise results (MacIntosh & Law, 2015).

Gender was found to be one of the important factors in shaping body image (e.g. Cash & Pruzinsky, 2002). Though research so far, as already mentioned, provides conflicting results. Some studies show that women are more dissatisfied with their bodies (Franco et al., 1988; Johnstone et al., 2008; Lagos-Hernández, Jerez-Fuenzalida, Fuentes-Vilugrón, Willschrei-Barra, Acuña-Molina, & Leichlte-San Martín, 2022).), while others show that both men and women are equally dissatisfied (Silberstein Stricgel-Mom, Timko, & Rodin, 1988). The findings of the present research did not show significant differences in body image assessment between the two sexes of the sample, confirming the second research hypothesis. These results are in agreement with much of the

literature that notes that there are not gender differences in terms of body image evaluation and that an ever-increasing number of men experience body dissatisfaction (Hausenblas & Fallon, 2006; Murray, Rieger, Karvlov & Touyz, 2013; Sabiston et al., 2019; Walker, Anderson & Hildebrandt, 2009).

Regarding the age effect on body image assessments, again no significant differences were found in the investigated population, rejecting the third research hypothesis. This finding complements, however, part of the existing literature, which claims that the body image of practitioners remains stable throughout lifespan (Grogan, 2017; Tiggemann, 2004) and that investment in appearance does not change with age (Davison & McCabe, 2005).

The body mass index, on the other hand, was the factor that showed statistically significant differences only in the case of the "Self-categorization of weight" dimension, with the members of the sample responding quite objectively. The "Normal weight" respondents evaluated statistically significantly the factor in relation to “Overweights” and “Obese” respondents, leading to a partial acceptance of the fourth research hypothesis. The results of the present study do not show a difference in body image dissatisfaction according to Body Mass Index, which contradicts both our predictions and the existing literature, which reports that overweight and obese individuals are more likely to feel dissatisfied with their bodies (Slevec & Tiggemann, 2011). This may again be related to the age of the members and possible acceptance of their image (Webster & Tiggemann, 2003). Another reason may be the society's standards: as Greeks have presented high obesity rates (WHO, 2016), the self-categorization and self-evaluation of the members of the sample about their body is a result of their comparison with part of the rest of the population.

The relationship between body image and physical exercise is a two-way relationship, in the sense that body image can influence participation in physical exercise, and physical exercise can influence exercisers' body image (Sabiston et al., 2019). From the results of this particular study, it appears that only the Body Parts Satisfaction dimension of the body image assessment scale may predict members' intention to continue being fitness centers' customers. These elements should be used by the fitness centers’ managers and give an impetus to their members to exercise in such a way that they feel more secure with their appearance. This push can be given in various ways, especially in terms of benefits and attention offered by the fitness centers’ personnel (Estrada-Marcén, Sanz-Gonzalo, Casterad-Seral, Simón-Grima, & Roso-Moliner, 2019; MacIntosh & Law, 2015). After all, the personnel has been found to be the most effective factor in retaining trainees in the field of fitness centers (Estrada- Marcén, et al., 2019; Glaveli, Papadimitriou, Karagiorgos & Alexandris, 2021). The fitness center’s management, moreover, should establish strategies that will satisfy their customers’ need for results, by creating easy to follow programs that could ensure physical adjustments and by improving the members’ interaction with the center’s employees and management (Tsitskari et al., 2017). Management evaluations to members (such as tactical BMI recording, body fat measurement, physical condition improvement or, even, better medical results or lessening of pain (e.g neck pain) may also accomplish the members’ need for results. Finally, as bibliography shows that people may feel uncomfortable when compared to others in terms of body image (e.g. Lamarche, et al., 2018), fitness centers management should attempt to lessen this stress. This may be a result of changing their promotional campaigns using “everyday” models.

According to the literature, service quality, customer satisfaction (Avourdiadou & Theodorakis, 2014; De Knop et al., 2004) and perceived value (Yu et al., 2014) are strong predictors of continued participation. As Hamer and Stamatakis (2010) reported, however, the psychological dimension of customers also plays an important role. Body image dissatisfaction, according to several studies, can be a barrier to exercise participation (Lantz, Hardy, Ainsworth, 1997; Sabiston et al., 2019; Schuler, et al., 2004). The management of the gyms should systematically try in every direction, both to provide quality services and to strengthen the psychology of the participants, in order to achieve the desired result: membership retention.

Conclusion

Strengths and limitations

The present study investigated how body image is evaluated by a sample of fitness centers members in Greece and whether it may predict their behavioral intention. Body image is moderately evaluated by all members of the sample. It seems to be evenly assessed by both genders and by all ages. A slight difference to its evaluation came from overweights and obese survey’s respondents. Fitness members’ future intention to participate in the center’s exercise programs may only be predicted by the factor *Body parts satisfaction*. These findings may assist the fitness sector and its entrepreneurs to invest more in the implementation of appropriate marketing strategies aiming to offer more engaging exercise experiences to their customers and elevating their services in order for the members to feel that their appearance needs are met.

However, this study has some limitations. Data were collected after the second covid-19 lock-down and this kept both the researchers out of the fitness installations, and maybe part of the fitness centers members. All fitness centers at that time were operating with specific protocols. The revision of the protocols at certain time intervals created insecurity for the registered or potential members. This quite limited the sample’s size. However, all necessary measures to protect the research participants were observed, while permission was obtained from University’s Ethics Committee. Moreover, data were collected from only one city in South Greece, and therefore no

generalizations may be made.

The concept of body image depends on the individual's own perception of their body and their self-reference. To measure body image, the tool chosen is multidimensional as it measures various aspects such as how the practitioner feels, thinks, perceives and evaluates their body and body parts. Quantitative research may not be sufficient to assess all aspects and in future research it could be enriched with qualitative data. Moreover, as questionnaires were selected after the covid-19 re-opening of businesses, it was not possible for the researchers to be present. Participants' weight and height was self-reported. Future surveys, would suggest the recording of somatometric characteristics by experienced researchers, or even the implementation of an intervention program aiming at improving parts of the body that the participants assess low. Finally, the evaluation of other parameters such as motivation or involvement will enrich the research results with information for the benefit of the retention of fitness members: for the benefit of the trainees themselves but also for the benefit of the business profitability.

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