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Analysis of the motivational factors of FitDance® practitioners in Brazilian health club

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ORIGINAL ARTICLE

ABSTRACT

Gymnastics and dance classes can be an excellent tool in combating physical inactivity, promoting a healthier lifestyle for practitioners. FitDance® is a modality with a fun and relaxing class, I which the teacher develops choreographies together with students. This study aimed to verify the motivational factors for the practice of FitDance® in gyms in a Brazilian city, as well as to verify possible differences in motivational factors among women of different age groups. The sample consisted of 89 women, aged 18 to 50 years old, who had been practicing FitDance® for at least one year. Participants answered the Exercise Motivations Inventory-2 and a sociodemographic questionnaire. The results indicate that the motivational factors Competition ($p = 0.003$, $\eta 2 = 0.28$) and Health Rehabilitation ($p = 0.021$, $\eta 2 = 0.22$) showed significant differences between women aged 21 to 30 years (Group 1) compared to those aged 41 to 50 years (Group 3). Younger age women seem to be more motivated by competitiveness. On the other hand, older women have greater motivation in relation to Health Rehabilitation. We conclude that FitDance® is a highly motivating modality, regardless of the age group.

Keywords: Gymnastics, Gym, Dance, Fitness centers, Motivation.

INTRODUCTION

The regular practice of physical activity has been an essential tool to fight the sedentary lifestyle growing worldwide (Després, 2016). Fitness centers have shown themselves to be a prominent place by offering physical activity in a guided and supervised manner (Viana, Skiff, Reis, & Navarro, 2012). Among the most sought activities in these places, resistance exercises, gymnastics and dance classes stand out. The movement through dance brings improvements in the quality of life, body image and well-being of its practitioners, reducing problems such as depression and low self-esteem (Koch, Kunz, Lykou, & Cruz, 2014). The greater acceptance of this activity is due to the fact that it provides joy and fun and not only the exhausting effort provided by other modalities (Marbá, Da Silva, & Guimarães, 2016).

Currently researchers have sought to identify the main reasons that lead people to exercise, with most psychological investigations being related to motivation studies (Gill, Williams, & Reifsteck, 2018). In this sense, the motivational theory that is most relevant in the scope of physical exercise is the Self-Determination Theory (Deci & Ryan, 1985). According to these authors, to be motivated means to be moved to do something. In addition, a person who does not feel any impulse or inspiration to act is characterized as unmotivated, while someone energized and activated to an objective is considered motivated (Ryan & Deci, 2000). This theory advocates that the subject can be motivated at an intrinsic (i.e., pleasure and satisfaction) or extrinsic level (i.e., objectives inherent to the individual) (Ryan & Deci, 2000).

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FitDance® is a dance style that integrates all musical styles with different choreographies (FitDance®, 2017). This modality presents the community as a pillar, promoting integration for everyone to dance together (FitDance®, 2017). Thus, it has an inclusive proposal, working with modern choreographic movements, presented in a didactic way, providing the learning and evolution of the practitioners (FitDance®, 2017). This modality is similar to others that are already being studied in the national scenario (Oliveira, 2015), although keeping its particularities. Additionally, it has an increasing number of fans in Brazil and worldwide. Arruda (2018) argued that FitDance® methodology might have a great influence on the success of classes. For author, this is a dynamic, democratic, fun and challenging modality (Arruda, 2018).

Although a lot of attention has been put so far to motivational factors for the practice of a bunch of physical activities in Brazil, no work that is known to us has sought to evaluate exclusively the motivational factors for FitDance®. Taking into account that metanalysis have already confirmed the benefits of dance practice for health and quality of life of the population (Koch et al., 2014), the aim of the present study was to analyze the motivational factors for the practice of FitDance® in gym clubs of the Brazil, as well as to verify possible differences in motivational factors among women of different age groups. The present study has two hypotheses: (a) practitioners will present high motivation scores for the practice of FitDance®; and (b) individuals of different age groups will show significant differences in all factors of Exercise Motivations Inventory-2 (EMI-2).

METHODS

Sample

This cross-sectional study involved 89 women, aged between 18 and 50 years, practioners of FitDance® at a network of fitness centers in south-east Brazil. The included participants have been practicing the FitDance® modality for at least one year. Subjects who left any item of the instruments blank were excluded from the analysis.

The Human Research Ethics Committee approved the study (protocol number 2.480.057). All procedures are in accordance with the declaration of Helsinki and Resolution number 466/12 of the National Health Council, as well as Operational Norm Nº 001/2013.

Instruments

Motivation to Practice Physical Exercise

We applied the Exercise Motivations Inventory-2 (EMI-2; Guedes, Legnani, & Legnani, 2012) to identify the motivational factors associated with physical exercise. The EMI-2 consists of 44 questions on a 6-point Likert scale (0 = Not true to 5 = Very true); the total score ranges from 0 to 220 points. The EMI-2 allows to identify, dimension and order aspects of intrinsic and extrinsic motivation for the practice of physical exercises (Guedes, Legnani, & Legnani, 2012).

The Brazilian version of EMI-2 used in this study is composed of ten factors: Pleasure and Well-Being (e.g., "To feel good"), Stress Control (e.g., "To help control stress"), Social Recognition (e.g., "To demonstrate my worth to others"), Affiliation (e.g., "To spend more time with friends"), Competition (e.g., "Because I like to compete"), Health Rehabilitation (e.g., "Because my doctor advised me to exercise"), Disease Prevention (e.g., "To prevent any health problem"), Body Weight Control (e.g., "To help maintain my body weight"); Physical Appearance (e.g., "To have a fit body") and Physical Condition (e.g., "To improve my physical condition"). For the present sample the estimated internal consistency (Cronbach's α) was calculated for all factors of the instrument (Table 1).

Sociodemographic Data

We applied a sociodemographic questionnaire to describe the sample. It includes general questions, such as: name, age, race/ethnicity, body weight and height (for calculating the Body Mass Index [BMI]) (World Health Organization [WHO], 2010), physical exercise practice, frequency of practice, how long and for what purpose.

Procedures

Managers of the gym clubs accredited to provide FitDance® were contacted to provide authorization to conduct this survey. After that, the instructors were personally contacted to schedule the day and time for the application of the instruments. Thus, questionnaires were individually applied before the beginning of the classes or after its end. All women present in classes during data collection took part of the study. They consent to participate voluntarily, signing the consent form.

Statistical analysis

Komolgorov-Smirnov test ($p < .05$), asymmetry ($Sk < 3$) and Kurtosis ($Ku < 7$) indicated a non-normal distribution of data. The age and BMI of the participants was described by mean and standard deviation and scores obtained in all subscales of the EMI-2 by median and standard error. Categorical data were described in relative frequency. The Kruskal-Wallis test was applied followed by a post-hoc peer review to identify possible differences in motivational factors between the groups established by age group, namely: (a) 18 to 30 years (Group 1), (b) 31 to 40 years (Group 2) and (c) 41 to 50 years (Group 3). Additionally, the effect size was calculated by the partial Eta-squared (η^2). Effect sizes of .20, .50 and .80 were considered small, moderate and high, respectively (Cohen, 1992).

We performed estimated internal consistency of the all EMI-2 subscales (Cronbach's α). Values greater than .60 were considered adequate (DeVellis, 2016). All data analysis was performed using the Statistical Package for the Social Sciences version 21.0 (SPSS Inc., Chicago, United States), adopting a 5% significance level ($p < .05$).

RESULTS

A total of 89 woman aged between 18 and 50 years (M_{age} = 34.63, SD = 9.2) took part voluntarily in the study. The BMI ranged 18.36 to 36.85 kg/m² (M = 25.49, SD = 2.87). An amount of 47.8% from the participants exhibited adequate BMI, 45.6%, overweight and 6.7%, obesity. They declared themselves as Brown (53.3%), followed by White (27.8%), and other ethnic origins (13.3%).

Comparison data between groups is shown in Table 1. Significant statistical differences between the groups were identified. Women aged 18 to 30 years (Group 1) showed a significant higher difference than women aged 41 to 50 years (Group 3) in the Competition subscale. On the other hand, in Health Rehabilitation subscale, values presented an inverse order, so Group 3 had scores higher and significant than Group 1. Regarding the other subscales, no significant difference was observed between groups.

Table 1

Comparison between groups and estimated internal consistency for all EMI-2 subscales

EMI-2 subscales	Group 1 (18 to 30 years) M (SE) $N = 29$	Group 2 (31 to 40 years) $M \pm (SE)$ $N = 30$	Group 3 (41 to 50 years) $M \pm (SE)$ $N = 30$	Test value	df	p-value	η^2	α
PWB	22.00 (4.36)	22.00 (2.99)	20.50 (3.44)	0.978	2	0.613	0.12	0.779
SC	17.00 (4.13)	19.00 (2.80)	18.00 (4.20)	4.565	2	0.102	0.24	0.887
SR	6.00 (4.21)	2.50 (3.28)	3.00 (3.69)	5.790	2	0.055	0.27	0.717
AF	13.00 (4.53)	13.00 (4.16)	13.50 (4.19)	0.356	2	0.837	0.05	0.684
CP	5.00 (6.59)[a]	3.50 (6.12)	4.42 (1.00)[a]	11.633	2	0.003**	0.28	0.848
HR	10.00 (1.83)[a]	10.00 (2.60)	11.50 (1.71)[a]	7.699	2	0.021*	0.22	0.651
DP	25.00 (5.58)	25.00 (4.66)	25.00 (2.04)	3.979	2	0.137	0.24	0.674
BWC	19.00 (4.16)	19.00 (4.34)	19.50 (4.90)	0.313	2	0.855	0.05	0.870
PA	15.00 (3.53)	19.00 (5.36)	17.50 (10.54)	1.541	2	0.463	0.09	0.658
PC	22.00 (4.85)	20.00 (4.20)	21.00 (2.82)	1.296	2	0.523	0.08	0.704

Note: M = Median; SE = Standard Error; df = *Degrees of Freedom*; η^2 = partial Eta-squared; α = Cronbach's α; EMI-2 = Exercise Motivations Inventory-2; PWB = Pleasure and Well-Being; SC = Stress Control; SR = Social Recognition; AF = Affiliation; CP = Competition; HR = Health Rehabilitation; DP = Disease Prevention; BWC = Body Weight Control; PA = Physical Appearance; PC = Physical Condition; [a] Significant difference between group 1 and group 2. * Significant to $p < .05$, **Significant to $p < .01$.

DISCUSSION

Some studies have already proposed to evaluate motivational factors for the practice of several dance modalities, such as Zumba®, ballroom dance, classical and contemporary (Abreu, Pereira, & Kessler, 2008; Fioravanti, Liberali, Mutarelli, & Artaxo, 2012; Oliveira, 2015). However, this study, to the best of our knowledge, was the first to investigate FitDance® motivational factors, a new dance modality that has been spread worldwide. In this sense, the present research adds important information to the literature, by indicating preliminary data on the motivating aspects for the practice of this modality. Therefore, the aim of this study was to analyze the motivational factors that lead several people, especially women, to seek these classes in different gym clubs in southeast Brazil. In addition, we sought to verify possible differences in motivational factors among women of different age groups. Results partially support our hypotheses by demonstrating significant differences between Groups 1 and 3 for the Competition and Health Rehabilitation subscales. Especially, younger individuals had a higher competitive level compared to the other age groups.

Women aged 31 to 40 (Group 2) showed a lower score than the other Groups in relation to the Social Recognition subscales. Part of this difference may be related to the fact that the typical tasks of people in this age group are mainly related to stability and professional advancement (Balbinotti, Barbosa, Balbinotti, & Saldanha, 2011). In addition, it is a phase marked by new events such as relationships, marriage, children and closer social ties (Papalia & Feldman, 2013), which can influence the practice of physical activity (Frazão & Andrade, 2015). According to Papalia and Feldman (2013), friends continue to play an important role in this phase of life, however unlike adolescents who seek identification with their peers, adults admit friendship based on mutual interests and values. These events may have contributed to the diminished degree of importance in the Social Recognition dimension by this group.

Regarding Competition, studies have already shown that younger individuals are more competitive in relation to physical activity (Balbinotti et al., 2011; Balbinotti & Capozzoli, 2008). Over the years, competitiveness has shown less influence on motivation to practice FitDance®. A study carried on by Balbinotti and Capozolli (2008) showed this same association, however they evaluated the practice of physical activity in general and not at a specific modality. As in all developmental stages, adolescence and early adulthood is permeated by specific psychological, sociological and physiological changes following this period, and should be considered for the proper understanding of individuals in this stage of life (Ferreira, Castro, & Morgado, 2014; Malina, Bouchard, & Bar-Or, 2009). Thus, according to the theory of human development, adolescents and young adults face some development tasks that include the exploration and testing of skills, such as entrance exams or university entrance and establishment of academic goals which can impact their habits and behaviors (Papalia & Feldman, 2013). Our results corroborate these aspects by identifying significant differences in relation to the Competition subscale between groups 1 and 3, with younger women presenting higher scores.

Motivation to practice physical activity related to competitiveness and overcoming limits significantly decrease throughout life, as opposed to motivation related to health and disease prevention that increases over time (Balbinotti & Capozzoli, 2008; Barbosa, 2006). Especially in relation to the Health Rehabilitation subscale, our results showed significant differences in relation to the groups. In other words, women aged 41 to 50 years (Group 3) had higher scores compared to younger women (Group 1).

This difference may be related to the aging process itself, which has a multifactorial nature - biological, physical and psychological factors (Martinez, Magalhães, & Pedroso, 2018; Papalia & Feldman, 2013). With this process, changes occur, such as greater vulnerability to chronic-degenerative diseases, locomotion disorders, decreased vigor and alertness, in addition to changes in environmental factors related to decreased income, possible rejections by the social group and removal of children (Dos Santos, Tavares, & Barbosa, 2010; Martinez et al.,

2018). Thus, such events can shape the motivation of these women, directing the practice of physical activity to seek and maintain health.

Finally, no difference was found in the factors Pleasure and Well-Being, Stress Control, Affiliation, Disease Prevention, Body Weight Control, Physical Appearance and Physical Condition. Thus, it is clear that these variables have the same degree of importance for all study groups. According to Balbinotti et al., (2011) the results obtained through the systematic practice of physical activity provide the sensation of pleasure and later the control of stress, regardless of the age group. Furthermore, Silva (2017) states that physical activity causes changes in several aspects, such as reducing stress, anxiety and improving cognitive and socialization functions at different ages, making these activities a primary tool for improving well-being. Additionally, Oliveira (2015) in a study similar to this one with the modality of Zumba® found that the main adherence factors are related to easy choreography, good performance of the teacher and the well-being provided by the activity, corroborating our results.

The present study is innovative and brings important information to the field of dance and gymnastics, assessing the motivational factors of a newly created modality, FitDance®. However, this research does have some limitations. First, our study used a self-report measures, which may not be the best alternative to assess some characteristics, due to the high bias of respondent's social desirability. However, the EMI-2 show adequate psychometric properties for the studied population (Guedes, Legnani, & Legnani, 2012). In addition, the calculation of the estimated internal consistency (Cronbach's α) for all factors of the instrument was performed. The second point is related to the type of study conducted: cross-sectional. Thus, it is not possible to establish a cause and effect relationship between the variables. For example, we do not know whether individuals seek FitDance® for a specific motivation or whether, throughout the practice of such modality, motivational factors change due to the characteristics of the modality. Therefore, we recommend longitudinal studies to assess this issue. Finally, this study presents a small sample focused on women from a single Brazilian city, which does not allow inferences on other cities in the country. However, advances were obtained through direct comparison between different age groups, expanding the understanding of motivational differences in relation to FitDance®.

CONCLUSION

Data from this research allows us to conclude that FitDance® is a highly motivating modality, regardless of the age group. The motivational factors Competition and Health Rehabilitation showed significant differences between women aged 21 to 30 years (Group 1) compared to those aged 41 to 50 years (Group 3). Younger ages seem to be associated with a higher level of competitiveness. Older women, on the other hand, showed greater motivation in relation to Health Rehabilitation. In relation to the other factors of EMI-2, no significant differences were found. It is worth concluding this study by indicating that the knowledge of motivational factors for the practice of FitDance® can be particularly useful for sports psychologists, Physical Education teachers and other professionals closely linked to regular practice of physical activity, allowing to direct their professional performance in a timely manner and effective.

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