Comparison of Psychophysiological Responses in Individual and Small Group Aerobic Training with Prescribed and Self-Selected Intensity

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Article

Comparison of Psychophysiological Responses in Individual and Small Group Aerobic Training with Prescribed and Self-Selected Intensity

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Abstract: Self-selecting the intensity of aerobic training is a perspective that allows practitioners to develop autonomy (choice of pace), improve physical fitness and achieve weight loss. To compare the effect of four aerobic training protocols on cardiometabolic and psychophysiological responses in physically inactive adult men and women. The sample consisted of 11 individuals aged 56 ± 10 years and BMI 29.2 ± 2.4 kg/m2 performed four different treadmill aerobic training protocols, including: 1-individual with self-selected intensity (ISS), 2-individual with prescribed intensity (IPI) (64-76% of HR max), 3-small group with self-select. selected intensity (SGS) and 4-small group prescribed intensity (SGP) (64-76% of HR max). Heart rate, lactate, perceived exertion, affective response, activation scale, enjoyment, intention to repeat the session, treadmill speed and total distance from the protocol were analyzed. Statistical analysis used ANOVA with Tukey's post hoc test ($p<0.05$). Heart rate, lactate, perceived exertion, activation scale, enjoyment, average speed and total distance analyzes did not show significant differences between protocols. The response affective showed a smaller decline in the ISS protocol ($p<0.05$), and the intention to repeat the training session was greater in the ISS protocol ($p<0.05$). Conclusion: The data allow us to conclude that the ISS training protocol produced superior results in affective response and intention to repeat the session.

Keywords: adherence; hedonic theory; affective response; enjoyment; physical activity; pleasure

1. Introduction

Physical inactivity is a risk factor for premature mortality and the development of non-communicable chronic diseases. Globally, 7.2% of death are related to all causes and 7.6% to cardiovascular diseases, respectively. Both conditions are attributable to physical inactivity [1]. Obesity-related mortality followed for 12 years in 300,000 Europeans demonstrated a 30% reduction in moderately active individuals [2]. Regular physical exercise is considered a determining factor in health due to the reduction of clinical risks at all age, although the likelihood of discontinuing regular exercise is 63% in the first three months and 96% at the end of 12 months [3].

Benefits of individualized training in adherence to an exercise program following the small group methodology have been investigated, demonstrating greater program retention over 24 months [4]. Perspective of small group exercise is a fitness trend, highlighted in 2022 and among the top 20 in 2023. It is related to aspects of greater socialization, motivational conditioning without losing the condition of personalized and individualized training prescription, which are relevant factors [5].

Historically, training prescription has been determined based on international guidelines, but researchers have suggested changing from a bipartite model in exercise prescription, which considers only efficacy and safety, to a tripartite model that emphasizes participation associated with perceived enjoyable experiences during the exercise session. This factor correlates with the intention to repeat the training experience, which could contribute to long-term adherence [6].

The perception of pleasure and displeasure during the training session can be expressed through affective responses. Sensations perceived as pleasant or unpleasant without cognitive processing are

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called central affect and can be defined in two dimensions: positive valence (pleasure) and negative valence (displeasure), and low activation (relaxation) and high activation (excitement). It is an elementary feeling and consciously accessible, which does not need to be directed towards an automatic brain pattern at that precise moment [7].

Hedonic Theory suggests that a pleasured individuals experience in an activity or a sense of vigor/energy, subjects are likely to repeat and increase, or prolong the pleasure feeling, avoiding or minimizing pain. This is often referred to a hedonic principle [8]. Affective responses have been identified as predictors of future involvement in exercise programs based on behavior change strategies [9–12], encouraging the maintenance of physically active behavior that is beneficial to adherence [7].

Enjoyment in the exercise program is defined as a positive response to the movement experience that reflects pleasure feelings, pleasant sensations, and joy. It represents an emotional experience perceived from cognitive evaluation processes. The positive feelings reported after exercise, is a strong psychological predictor for exercise behavior the maintenance [11–13].

A higher perception of pleasure and enjoyment during physical exercise seems to be associated with self-selected training intensity. It is a suitable stimulus for beneficial organic modifications for health, allowing individuals to feel the sense of choice about their behavior contributing to more enjoyable exercise experiences [9,14].

2. Procedures

Eleven adults (9 women and 2 men) who did not practice regular physical exercise (56 ± 10 years; 76.1 ± 9 kg; 29.2 ± 2.4 kg/m2 and 34, 5 ± 8.8% body fat). The sample was recruited through publications on social networks (explanatory posts and videos) highlighting the importance of exercise for health and daily life. The inclusion criteria were: physical activity level of less than 150 minutes per week; no previous experience with small group training methodology; absence of cardiovascular, neurological, musculoskeletal impairments, medical authorization and absence of any injuries.

Volunteer recruitment and data collection were carried out during the period of the SARS-COV 2 (COVID-19) pandemic in a phase where establishments were reopened following health recommendations. The volunteers performed all exercise protocols using a N-95 facial protection mask.

It was decided not to perform the incremental test to analyze the estimated VO2max and we adopted the formula (220-age) as a criterion to estimate the maximum heart rate (HRmax) [15].

Therefore, participants carried out 5 visits with an interval of 72 hours between each visit. On the first visit, all procedures were explained with anamnesis and pre-participation questionnaire, as well as anthropometric assessment and familiarization with the equipment used MOVEMENT model RT-250 ergometric treadmill. The second visit consisted of randomizing the sample into four different aerobic training protocols.

Individually prescribed protocol (IPI): participants performed 30 minutes of aerobic training on a treadmill at the prescribed intensity (64%-76% HRmax) [16]. As a range of moderate intensity sufficient to promote improvement in cardiorespiratory fitness. The protocol took place only in the presence of the participant and the researcher.

Individually self-selected protocol (ISS): participants performed 30 minutes of aerobic training on a treadmill with an intensity chosen by the volunteer. On the ISS, subject and researcher were together. The speed of the treadmill was chosen autonomously by the volunteer who felt most appropriate to complete the training. Only participant and re-searcher were together.

Prescribed Small Group Protocol (SGP): 3 participants simultaneously performed 30 minutes of aerobic training at prescribed intensity (64% to 76% HRmax). The treadmills were positioned so as not to allow visualization of intensity data, avoiding external influences on individual intensity choices.

Self-selected small group protocol (SGS): 3 participants simultaneously performed 30 minutes of aerobic training with self-selected intensity, at a pace that the subjects felt most comfortable during training.

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During the data collection phase, we lost a participant who did not complete the in-dividual ISS and IPI protocols. Thus, the data from the following study includes the participation of 11 individuals.

Psychometric scales: subjective perception of exertion (RPE); feeling scale (FS); felt arousal scale (FAS); physical activity pleasure scale (PACES); and intention to repeat training (INT) were chosen to indicate the influence of avoidance on subjects' choices. Participants were instructed not to talk about their protocol perceptions and choices on psychometric scales.

In all protocols, participants did not have access to psychophysiological information.

HR responses were displayed on a tablet where only the researcher had access to the information and lactate collections were performed with a drop of capillary blood extracted from the participant's fingertip.

In the ISS and SGS training protocols, the standard phrase was used: "choose the in-tensity that you believe is best for your health". All protocols were carried out at the same times (8:00 am-12:00 pm), respecting a 72-hours interval between sessions.

In the prescribed and self-selected intensity protocols, HR, LACT, RPE, FS and FAS were determined. Psychophysiological measurements were carried out at rest, 5th, 15th and 25th minutes of training.

At the end of each protocol, the subjects remained seated for 15 minutes in recovery, and HR, RPE, FS, FAS, PACES and INT were collected. Psychometric measurements were carried out without expressions of verbal perception, to avoid interference in interpersonal decision-making (vicarious experience, fear of judgment and anxiety).

The treadmill speed (TS) was collected at minutes 5th, 15th and 25th and the total distance (TD) covered by the participants at the end of the protocol.

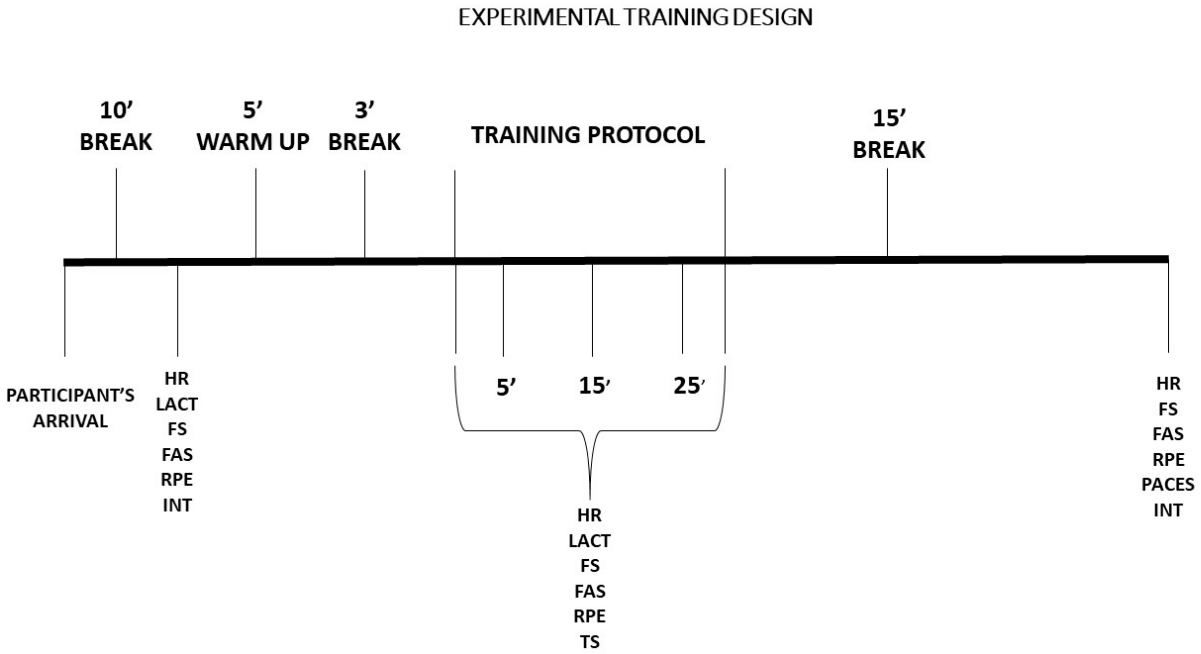

Figure 1. Experimental training design.

Instruments

Heart Rate Assessment (HR)

The HR was determined throughout the protocol using the POLAR H7 heart rate monitor connected via Bluetooth to the POLAR TEAM APP. Relative intensity was calculated based on the predicted maximum heart rate (HRmax) for each participant, HRmax = 220-age (15). It was collected

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at rest, minutes 5th, 15th, 25th, after 15 minutes at the end of the protocol. Totaling 5 measurements in each protocol.

Blood Lactate Assessment (LACT)

LACT was assessed using the Accutrend Plus Roche Portable Monitor at rest during the 5th, 15th, and 25th minutes of the protocol. Totaling 4 measurements in each protocol.

Subjective Perception of Effort (RPE)

RPE was assessed using the Borg Rating of Perceived Exertion scale [17], ranging from 6 to 20 points, where 6 represents "no effort" and 20 represents "maximum effort". It was collected at rest, minutes 5th, 15th, 25th, after 15 minutes at the end of the protocol. Totaling 5 measurements in each protocol.

Affective Response to Exercise (FS)

The affective response to exercise was assessed using the Feeling Scale with an 11-point bipolar affective scale, ranging from +5 ("very good") to -5 ("very bad"), as pleasure and displeasure respectively [18]. At the beginning of each protocol, participants were given the following instructions: "Some individuals experience pleasure during exercise, while others experience displeasure. This perception can vary among individuals. How do you evaluate your perception of pleasure or displeasure at this moment during exercise?". It was collected at rest, minutes 5th, 15th, 25th, after 15 minutes at the end of the protocol. Totaling 5 measurements in each protocol.

Exercise Activation Response (FAS)

The perception of activation during exercise was measured using the Felt Arousal Scale, ranging from 1 ("low activation") to 6 ("high activation"). Activation at the level of subjective experience refers to a sense of mobilizing energy, summarizing the physiological state [19]. It was collected at rest, minutes 5th, 15th, 25th, after 15 minutes at the end of the protocol. Totaling 5 measurements in each protocol.

Physical Activity Enjoyment Scale (PACES)

Consists of an 18-item scale that assesses the perception of enjoyment during exercise or physical activity. The PACES consists of an inverted score (12 negative items) and 6 positive items on a 1-7 bipolar scale based on the instruction "How do you feel right now about the exercise or physical activity?" [20]. Was measured at the end of the protocol.

Intention to Repeat Exercise Session (INT)

Participants' intention to engage in the exercise performed during the next week and the next month was assessed using a 2-item scale. Participants were asked: "I intend to per-form this exercise that I performed today at least 3 times in the next week" (Intention 1). "I intend to perform this exercise that I performed today at least 3 times per week during the next month." Responses were determined on a 7-point scale with anchors ranging from 1 - "very unlikely" to 7 - "very likely" [21]. Was measured pre and post protocol

Treadmill Speed (TS)

Selected track speed was collected at minutes 5th, 15th, 25th in all protocols.

Total Distance from the Protocol

At the end of each protocol, the total distance covered was collected.

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Statistical Analysis

Statistical analyses were performed using SPSS version 25.0, with means and standard deviations for all variables studied and percentage difference. Normality and homoscedasticity were assessed using the Shapiro-Wilk test and Levene's test.

Comparison of dependent variables (HR, LACT, FS, FAS, PACES, TS and TD) was performed using repeated measures ANOVA, with Tukey's pairwise comparisons post hoc. The intention to repeat exercise session analysis used a paired t-test for pre- and post-protocol comparisons.

Comparisons between protocols used Cohen's d (1988) for effect size observations (small effect = 0.20, medium effect = 0.50, large effect = 0.80). Differences and changes between different protocols were expressed in Δ% values. Significance was set at 5% ($p<0.05$).

3. Results

Table 1 demonstrates comparisons of cardiometabolic responses and subjective perception of effort in different protocols.

We considered the ISS protocol as the baseline in all comparisons. One-way ANOVA indicated that HR remained similar in all protocols. LACT concentration was 10.6% higher in the SGS protocol compared to ISS, although the values did not show significant differences between protocols ($p>0.05$). The RPE was 7.1% small in SGS than ISS, without significant differences ($p>0.05$).

Table 1. Comparison of cardiometabolic responses in different aerobic training protocols.

HEART RATE - HR							
PROTOCOL	**N**	**X**	**S**	**Δ%**	**ES – r**	**Cohen d**	**P Value**
ISS	55	108.2	27.4	100%			0.141
IPI	55	107.6	24.1	-0.5%	0.01	0.02	
SGS	55	98.8	22.7	-8.7%	0.18	0.37	
SGP	55	106.6	21.6	-1,4%	0.03	0.06	
LACTATE - LACT							
PROTOCOL	**N**	**X**	**S**	**Δ%**	**ES – r**	**Cohen d**	**P Value**
ISS	44	2.9	1.1	100%			0.819
IPI	44	2.9	1.6	0.7%	0.01	0.01	
SGS	44	3.2	2.5	10.6%	0.08	0.16	
SGP	44	3.1	1.2	4.3%	0.06	0.12	
SUBJETIVCE PERCEPTION OF EFFORT - RPE							
PROTOCOL	**N**	**X**	**S**	**Δ%**	**ES – r**	**Cohen d**	**P Value**
ISS	55	10.0	3.4	100%			0.335
IPI	55	9.6	3.1	-3.3%	0.05	0.02	
SGS	55	9.3	2.7	-7.1%	0.12	0.23	
SGP	55	10.3	3.1	3.3%	0.05	0.10	

Table 2 demonstrates comparisons of psychological responses in different protocols.

ONE-WAY ANOVA showed that the affective response was 16.8% and 26.8% lower in IPI and SGP, suggesting that the prescribed intensity reduces pleasure compared to ISS. A significant difference was found between the ISS protocol and the other protocols ($p<0.05$). Activation did not show a significant difference among groups. On the other hand, SGP group showed higher activation compared to ISS.

Enjoyment with training was 2.7% and 6.4% higher in ISS compared to IPI, SGS, and SGP, without statistical difference ($p>0.05$).

Table 2. Comparison of psychological responses in different aerobic training protocols.

FEELING SCALE - FS							
PROTOCOL	**N**	**X**	**S**	**Δ%**	**ES – r**	**Cohen d**	**P Value**

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ISS	55	4.0	1.2	100%			0.006*
IPI	55	3.3	2.0	-16.8%	0.20	0.41	
SGS	55	3.7	1.6	-7.7%	0.10	0.21	
SGP	55	2.9	1.8	-26.8%	0.33	0.71	
				FELT AROUSAL SCALE - FAS			
PROTOCOL	**N**	**X**	**S**	**Δ%**	**ES – r**	**Cohen d**	**P Value**
ISS	55	3.7	1.5	100%			0.276
IPI	55	3.5	1.6	-5.9%	0.07	0.14	
SGS	55	3.5	1.5	-5.4%	0.07	0.13	
SGP	55	3.9	1.4	7.4%	0.09	0.19	
				PHYSICAL ACTIVITY ENJOYMENT SCALE - PACES			
PROTOCOL	**N**	**X**	**S**	**Δ%**	**ES – r**	**Cohen d**	**P Value**
ISS	11	113.1	13.0	100%			0.775
IPI	11	105.8	23.8	-6.4%	0.18	0.38	
SGS	11	110.0	17.4	-2.7%	0.10	0.20	
SGP	11	106.6	16.9	-5.7%	0.21	0.43	

*p<.0.05.

Table 3 demonstrate the intention to repeat (INT) the training protocols. Results suggest that self-selected training is strongly associated with satisfaction and intention to repeat the training. The ISS pre compared to post protocol, showed 9.7% (p<0,05) higher INT, as well as in SGS (6.8%), compared to prescribe protocols.

Table 3. Comparison of intention to repeat the training session in different aerobic training protocols.

				INTENTION TO REPEAT THE TRAINING SESSION - INT			
PROTOCOL	**N**	**X**	**S**	**Δ%**	**ES – r**	**Cohen d**	**P Value**
ISS – BEFORE	11	5.6	1.1				0.025*
ISS – AFTER	11	6.2	0.8	9.7%	0.28	0.77	
IPI – BEFORE	11	5.5	1.2				0.176
IPI - AFTER	11	5.1	1.6	-8.2%	0.06	0.11	
SGS – BFORE	11	5.5	1.5				0.167
SGS - AFTER	11	5.8	1.1	6.8%	0.14	0.27	
SGP – BFORE	11	5.5	1.0				0.821
SGP – AFTER	11	5.6	1.4	1.6%	0.04	0.07	

*p<.0.05.

Table 4 demonstrates comparisons of treadmill speeds (TS) and the total distance (TD) covered between different protocols

ONE-WAY ANOVA showed that the average speed in SGP was 2.6% and IPI 1.8% higher than ISS, while SGS was 1.8% lower than ISS, not showing significant differences between protocols (p>0.05).

TD covered was 3.9% greater in SGP compared to ISS, the SGS protocol presented a 3.3% shorter distance compared to ISS. IPI presented the same distance traveled compared to ISS, not showing significant differences between protocols (p>0.05).

Table 4. Comparison of treadmill speed and total distance in different aerobic training protocols.

				TREADMILL SPEED – Km/h - TS			
PROTOCOL	N	X	S	Δ%	ES - r	Cohen D	P value
ISS	33	6.0	0.8	100%			0.418
IPI	33	6.1	0.6	1.8%	0.08	0.16	
SGS	33	5.9	0.6	-1.8%	0.07	0.14	

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SGP	33	6.1	0.8	2.6%	0.19	0.39	
TOTAL DISTANCE – Km - TD							
PROTOCOL	N	X	S	Δ%	ES - r	Cohen D	P value
ISS	11	3.1	0.3	100%			0.444
IPI	11	3.1	0.3	0%	0	0	
SGS	11	3.0	0.3	-3.3%	0.17	0.36	
SGP	11	3.2	0.4	3.9%	0.18	0.36	

4. Discussion

The when considering physical inactivity and excess body weight as risk factors for early mortality, increasing participation in regular physical exercise programs is a positive strategy for health and reducing injuries [1,2].

The intensity of aerobic exercise is related to the perception of pleasure or displeasure during exercise [8,10,13,22]. Such perceptions are expressed by the affective response, which appears to predict future participation in exercise programs [12].

On the other hand, abandonment of exercise programs is around 96% after completing 12 months (3), which has been associated with the perception of pleasure or displeasure, perception of fun that is related to the intention to repeat the exercise session. [10,11,13,23]. It is speculated that physical exercise prescription models are generally based on a "two-pronged" logic, considering efficacy and safety in regular practice. However, it is current to think of the "tripartite" logic, considering the perceptions of pleasure or displeasure as determining perceptions in the practice of physical exercise. The tripartite approach points out that more enjoyable training sessions can contribute to increasing the intention to repeat the physical exercise session and thus can contribute to greater adherence to physical conditioning programs, combined with effectiveness and safety [6,7].

The tripartite model is in line with the hedonic theory of human behavior, suggesting that individuals will tend to repeat behaviors that are perceived as more pleasurable [7,8]

Therefore, investigating training methods that promote greater perception of pleasure, whether from the perspective of small group or individual training, are scarce in the literature, leading us to hypothesize a strategy that could increase adherence to physical conditioning programs. Small group training models indicate that the average length of stay in exercise programs is 24 months [4].

The present study analyzed psychophysiological responses in individual and small group aerobic training with prescribed and self-selected intensities. Corroborating our primary hypothesis, we found that the self-selected intensity compared to the moderate intensity prescribed in aerobic training did not present significant differences in HR, LACT, RPE, FAS, PACES, TS and TD ($p>0.05$) [22,23].

Our results indicate that the choice of aerobic exercise intensity by practitioners is generally classified as moderate, similar to the intensity of the training prescribed in the present study. Volunteers perform different training models with the same intensity, expressed by the variables (HR, LACT, AS and TD), resulting in the same perceived effort (RPE) and the same activation (FAS). We found no differences in the average treadmill speeds performed in both protocols, ISS (6.0 km/h), IPI (6.1 km/h), SGS (5.9 km/h) and SGP (6.1 km /h) ($p>0.05$) and in the distances covered by participants ISS (3.1 km), IPI (3.1 km), SGS (3.0 km) and SGP (3.2 km) ($p> 0.05$), our results indicate that the intensity was similar in both protocols. As the sample consisted of individuals who were not physically active and were overweight, we consider that encouraging self-selection is a strategy that could be associated with the development of autonomy and the intention to repeat the training [7,9,22,23].

Our secondary hypothesis was that small group training would positively influence psychological responses [4].

However, our hypotheses did not demonstrate a smaller decline in FS in the ISS protocol in relation to IPI, SGS and SGP ($p<0.05$) and higher scores for INT ($p<0.05$). The data demonstrated that ISS could contribute to greater perception of pleasure (16.8% higher compared to IPI; 7.7% compared

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to SGS; 26.8% compared to SGP). Regarding the intention to repeat the ISS exercise session, it was 9.7% higher than the other protocols, even with similar training intensities [7,9–11,24].

The results of the present study are in line with the hedonic theory of behavior, suggesting that individuals tend to have a greater intention to repeat behaviors that they consider more pleasurable [8,9,12].

We understand that the lower perception of pleasure and lower intention to repeat the exercise session in the SGS and SGP is associated with the cross-sectional design of the present study, allowing us to consider that the longitudinal analysis could be more effective in terms of the intention to repeat the protocols. Therefore, we consider that longitudinal protocols could bring other components such as interpersonal interactions, especially in small groups. A longer period of relationship between participants could promote better socialization, factors that are associated with pleasure, intention and adherence [4].

Enjoyment is considered an important variable in staying in exercise programs, contrary to our hypotheses. The PACES scores, despite being higher in the ISS protocol, did not show significant differences between the protocols ($p>0.05$) [25]. We speculate that the cross-sectional model was not sensitive to these variables.

Corroborating our results, the responses of cardiometabolic variables (HR, LACT) showed similarity between the prescribed and self-selected protocols. However, in the same study contradicting our results in the variable (FS), researchers did not find significant differences between the prescribed and self-selected protocols in the affective response. It is worth mentioning that this study used an interactive screen model with a virtual cyclist, participants were instructed to follow the cyclist model on screen, which could alter self-perception, physical sensations and attention to exercise-related stimuli [26].

In our study, there was no interference from any external element during the exercise.

Contrary to our results, no significant differences were found in the affective response between the prescribed and self-selected intensities. We imagine that because the affective response was collected at two moments throughout the protocol (minutes 8 and 18), the smaller number of FS measurements may have influenced the final results. Our study design collected the affective response variable at 6 different moments (rest, 5', 15', 25' and after 15' of the ends of the protocol [22].

On the other hand, considering exercisers who are not physically active and are overweight, our study suggests that the possibility of choosing intensity could result in less discomfort when practicing aerobic training. We found that participants who performed ISS, IPI, SGA and SGS at similar intensities, speed and distance, although the perception of pleasure was greater in ISS, a fact that initially points to stimulates self-selection of intensity. Greater perceived pleasure during physical exercise is related to greater future participation and may be an important aspect for long-term participation in exercise programs [7,9–11,24].

We emphasize that our results showed a greater decline in FS and PACES in the IPI and SGP prescribed intensity protocols, since based on the fact that pleasure and fun are determining factors in remaining in physical exercise programs, we could consider that self-selection is a strategy for untrained people. with excess body weight. The ISS and SGS protocols suggest higher pleasure and fun scores, which could be explained by autonomy in choosing the rhythm, which is a positive perception of affection in untrained individuals. On the other hand, the IPI and SGP protocols suggest lower pleasure and enjoyment scores. Our study shows that imposing intensity on aerobic training could negatively impact individuals' maintenance of physical fitness programs [9,14].

The present study indicates that sedentary and overweight individuals perceive more pleasure and greater intention to repeat the exercise session when training alone at a self-selected intensity [7,9–11,22], even with similar intensities. Training intensity does not seem to influence cardiometabolic responses (HR and LACT) and some psychological responses (RPE, FAS, PACES) [22,23,26].

As a limitation of our study, we point out the small number of participants (n=11). We started the project with 15 participants, during the data collection period we had 4 participants drop out. In

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the present study we present data from 11 participants who were those who completed the 4 protocols.

The absence of a test for indicators of cardiorespiratory fitness, such as determining the estimated maximum Vo2, would be useful in future studies to better associate affective and physiological indicators.

In our study we compared men and women together, we speculate that this is a limitation, as there may be differences in the psychophysiological responses studied in the present study when comparing different genders.

Both aspects were hampered as data collection was carried out during the SARS-COV2 (COVID-19) pandemic. The difficulty in finding participants was great as individuals were afraid to leave their homes, there was a risk of contamination. The project included a visit for the incremental test to determine maximum VO2, but with the threat of closure of establishments, we reduced the number of visits by participants.

5. Conclusions

The results of the study demonstrated that the positive affective response during the exercise session in the ISS protocol was related to higher scores in the intention to repeat the training session. Based on the hedonic theory, our results suggest that individuals who are not physically active and are overweight perceive more pleasure and a greater intention to repeat the exercise session when they perform aerobic exercises at a self-selected intensity and alone. We point out a tendency among this population to engage in activities that they consider pleasurable and fun, trying to avoid pain and displeasure. The dynamics between positive and negative affect can influence current behavior and intentions to continue regular exercise. Further studies are needed to determine the effectiveness of the small group training model, especially self-selected intensity on enjoyment, enjoyment, and intention to repeat the exercise session.

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Informed Consent Statement: The informed record was obtained from all individuals involved in the study.

Conflicts of Interest: The authors declare that there is no conflict of interest.

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