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## APPLICATION OF THE CONTINUOUS VARIABLE METHOD IN THE PLANNING OF THE DANCE THERAPY CLASSES FOR THE IMPROVEMENT OF THE RESISTANCE OF THE PARTICIPANTS OF THE PARISH GRL. PEDRO J. MONTERO OF YAGUACHI CANTON, ECUADOR

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**Summary.** The aim of this study was to find out how the application of the continuous variable method affects the improvement of the resistance of the participants in the dance therapy classes. The general objective of this project was to design a proposal for the application of the continuous variable method in dance therapy classes to achieve the improvement of resistance. A quantitative, experimental, cross-sectional and field study was carried out with a total of 20 adult women between the ages of 20 and 59 years old. To determine the initial state of resistance, a pre-intervention assessment was carried out, recording the results on observation sheets. Student's t-statistic for related samples was used to compare the means in relation to the research objectives, since the same group was evaluated in a pre- and post-evaluation. From the results obtained, it can be seen that there is a significant increase in the resistance observed in the pre-evaluation of partial fatigue with a mean of 12.95 minutes and the post evaluation of partial fatigue with a mean of 22.75 minutes; with a confidence level of 0.05, observing a value of  $p = .000$ . Likewise, it can be seen that there is an increase in the resistance observed in the pre-evaluation of total fatigue with a mean of 19.80 minutes and in the post-evaluation of total fatigue with 30.40 minutes, with a confidence level of 0.05, observing a value of  $p = .000$ .

**Key words:** Physical training methods, motor fatigue, physical capacities, health, dance.

## **APLICACIÓN DEL MÉTODO CONTINUO VARIABLE EN LA PLANIFICACIÓN DE LAS CLASES DE BAILOTERAPIA PARA EL MEJORAMIENTO DE LA RESISTENCIA DE LAS PARTICIPANTES DE LA PARROQUIA GRL. PEDRO J. MONTERO DEL CANTÓN YAGUACHI, ECUADOR**

**Resumen.** Este estudio, pretendía conocer, cómo incide la aplicación del método continuo variable en la mejora de la resistencia de las participantes en las clases de bailoterapia. El objetivo general de este proyecto, fue diseñar una propuesta de aplicación del método continuo variable en las clases de bailoterapia para lograr el mejoramiento de la resistencia. Se realizó un estudio de tipo cuantitativo, experimental, de corte transversal y de campo, participaron un total de 20 mujeres adultas, con edades entre 20 y 59 años. Para saber el estado inicial de resistencia se llevó a cabo una evaluación pre intervención, registrando los resultados en fichas de observación. Se utilizó la estadística t de Student para muestras relacionadas por tratarse del mismo grupo evaluado en una pre y post evaluación, para comparar las medias con relación a los objetivos de la investigación. De los resultados obtenidos, se aprecia que existe un incremento significativo de la resistencia observada, en la pre evaluación de cansancio parcial con una media de 12,95 minutos y la post evaluación de cansancio parcial con una media de 22,75 minutos; con un nivel de confianza de 0,05, observando un valor de  $p = ,000$ . Así mismo, se aprecia que existe un incremento de la resistencia observada en la pre evaluación de cansancio total con una media de 19,80 minutos y en la post evaluación de cansancio total con 30,40 minutos, con un nivel de confianza de 0,05, observando un valor de  $p = ,000$ .

**Palabras clave:** Métodos de entrenamiento físico, cansancio motor, capacidades físicas, salud, baile.

### **Introduction**

Dance therapy is considered a tool to help people improve their physical, psychological and social health, however, the approach that has been given to it focuses more on the contents (dances) and the methods to organize these contents, than on those methods that will improve the physical condition of those who practice it. In order to develop a good physical-health condition, it is necessary to improve the basic physical *endurance* capacity through aerobic training. According to Bermúdez et al. (2019), performing systematic physical exercise, preferably of the aerobic type, which allows the degradation of triglycerides stored in adipose tissue and the substantial reduction of body fat; is the most effective strategy to prevent or reduce obesity, reducing the risk of cardiovascular disease.

Dancing as a means to improve basic physical capacities, especially endurance, requires one or more methods to achieve this objective; however, there is no theoretical-practical material or studies on the subject to support and reinforce the knowledge of trainers, monitors or instructors of this type of training. Every day the demand for aerobic dance trainers and instructors is increasing and scientific support material is scarce. Rivera (2017), points out that since 2012 in the province of Chimborazo, as in the other provinces of the country, the National Government initiated the project, "Ecuador Ejercítate", whose main objective is to reduce the levels of sedentary lifestyle of its participants, through the implementation of an activation program for the population, with the practice of dance therapy and its implementation will be long-term with a considerable economic investment.

According to Salinas (2018), sport specialists have a great responsibility towards their clients, part of those responsibilities are: performing an initial assessment of the client's state of health and physical condition to structure training sessions correctly, in order to make a safe

and effective exercise prescription, systematically teaching and communicating ideas and notions, maintaining an appropriate level of knowledge and experience to train people, proposing real objectives, select the activities preferred by the client to keep him/her motivated, make any necessary corrections to the training program, carry out periodic evaluations to elaborate a new prescription that generates physiological changes and health benefits, provide information to the practitioner about the benefits of physical exercise and the positive impact on quality of life.

The present research work will improve the endurance of people who regularly attend aerobic dance classes, in order to improve their physical condition. Resistance training is important to optimize cardio vascular and respiratory functioning, however, no importance is given to the application of a resistance training method that provides a solution to this problem. The aim is to know how the application of the continuous variable method affects the improvement of endurance when implemented in a controlled aerobic dance program.

This research will allow the identification of possible errors in the methods and instruments to meet the physical needs and how to help achieve the expected results in the improvement of resistance during dance therapy classes. Reality shows us that the complexity surrounding modern training is increasing every day. This makes it necessary to have a training plan with a scientific methodological support, where the objectives are specified, where a sequential process is followed and improvisation is avoided. This will replace the empirical work of the trainer, providing him/her with the knowledge, skills and abilities necessary to know, plan and conduct training.

Finally, it is worth mentioning that, in terms of social relevance, there is currently no scientifically based planning in dance therapy classes to measure the physical endurance of the practitioners of this activity. For this reason, it is convenient to carry out the research, it is considered that from the conclusions and recommendations a new model will emerge that will contribute to future projects. In terms of its practical relevance, it will allow trainers, instructors and instructors to recognize the implication and importance of planning aerobic dance training with the continuous variable method, and to take the pertinent actions to improve it. On a theoretical level, it will be favored by increasing the knowledge about the relationship between physical condition and the improvement of endurance through the continuous variable method. This type of research will allow decisions to be made to motivate teachers, trainers and monitors, and in turn will be reflected in the improvement of the health of the population that attends this type of classes.

For this reason, the general objective of this study was to design a proposal for the application of the continuous variable method in dance therapy classes to improve the participants' resistance to design a proposal for the application of the continuous variable method in dance therapy classes in order to improve the resistance of the participants.

## **Method**

### ***Design and methodology***

This is a quantitative research, which is justified since pre and post intervention values are required to prove that the continuous variable method applied in the aerobic dance classes improves the resistance of the participants. The project was divided into three phases: planning and design prior to the field study, with a duration of one month; carrying out the field work

with a duration of one month and a frequency of three weekly sessions applying the continuous variable method in the dance therapy classes. And finally, the preparation of the final report.

The study is a cross-sectional experimental design, with repeated measurements (resistance assessment) pre- and post-intervention, under special conditions created for this purpose. The persons investigated were fully aware that they were being evaluated and were part of a group previously formed by the parish authorities. The research lasted one month.

### ***Participants***

The population consisted of 20 adult women between 20 and 59 years of age from the parish of General Pedro J. Montero in Yaguachi. The research was carried out with 100% of the population. The criteria for participation were: signing the informed consent form, completing a survey and a verbal commitment to attend training sessions on time. All participants gave their consent to participate in the research, which was previously approved by the ethics committee of the Universidad Internacional Iberoamericana (UNINI).

### ***Instrument***

The techniques used for data collection in this research were: the survey with closed questions for the participants of the parish Gral. Pedro J. Montero of Yaguachi Canton and pre- and post-intervention observation sheets. The survey was conducted to find out if the members of the dance therapy group of the parish had previously received classes in this modality with a continuous method, without interruptions and with varying intensities, as well as to find out the degree of participation and relevance that this training modality had for the participants as a mechanism to improve their health.

For the observation sheets, we have based ourselves on the concept of resistance by Vrijens (2006) and Hohmann et al. (2005). The cards were divided into three sections: the first to record partial fatigue in minutes, i.e., the ability to keep dancing only with the lower body without the use of arms and with a decreased quality of movement. The second section belongs to total fatigue, which is the moment when the performer cannot continue dancing with the lower and upper body and needs to march on her own ground until she recovers and integrates back into the training or definitively withdraws. And a third section to record observations if necessary.

The participants were identified according to a number superimposed on the T-shirt and organized in ascending rows, in order to be able to enter the data and keep better control of individual performance during the evaluation. An external trainer was contacted, who was in charge of carrying out the observation during the pre- and post-evaluation and filling out the pre- and post-intervention forms. The observer was previously trained for this purpose. A stopwatch was used to enter data in minutes for each participant.

### ***Variables***

The independent variable *continuous method*, understood as the cause, was first studied to understand its characteristics, benefits and protocols applicable in the moments of greater effort and those of lesser effort during physical exercise. For the pre and post intervention evaluation and according to the needs of the group, a variation of the intensity was chosen in a range of 1 to 10 minutes for the moments of higher intensity alternated with moments of medium or low intensity for an incomplete recovery with a minimum time of 2 minutes or more than 3 minutes, depending on the level of effort made a range of 1 to 10 minutes for the moments of higher intensity alternated with moments of medium or low intensity for an incomplete recovery with a minimum time of 2 minutes or more than 3 minutes, depending on the level of effort made in the moments of higher intensity. During the research process, instead, we opted

for a protocol that allows a gradual progression and adaptation to the effort for the 4 weeks, working within a range of 5 minutes for the moments of higher effort and those of lower intensity of less than 3 minutes. The continuous variable method was applied in the planning of the dance therapy classes, using the goals of the music (beat) as the indicator of the change of intensities, that is, the speed of the music and the songs were adapted to the concept, characteristics and effort protocols of the continuous variable method for which the Adobe Audition program was used. The music underwent as many cuts or extensions as necessary to achieve the changes in intensity proposed by the method and there were no interruptions between songs. It was necessary to study each mix in detail to have complete mastery and control of the dances and intensity changes, in order to verbally anticipate the participants and prepare them psychologically for the next effort.

With respect to the independent variable dance therapy, the methods for organizing the contents were applied, together with the *variable continuous* resistance training method, in order to improve the resistance levels of the research participants.

The dependent variable *resistance*, understood as the effect, was measured in minutes of dynamic work. Participants in the pre- and post-intervention assessments were required to dance for as long as possible, without interruptions and at varying intensities. Partial fatigue (dancing without using arm technique, only working with the lower body) and total fatigue (impossibility to continue dancing) were used as indicators to measure the initial and final level of resistance. During the two evaluations, the moment in which the participants manifested partial or total fatigue was recorded in minutes on observation cards, and at the end of the research, the results obtained were analyzed to determine the impact of the application of the continuous variable method on the improvement of the participants' endurance.

### **Procedure**

Prior to conducting the pre-intervention assessment, all the documents necessary to initiate the research were organized. Subsequently, the facilities where the training sessions would be held and the audio equipment were evaluated, verifying that the surface of the room would allow the feet to slide properly to avoid injuries.

Participants were explained the conditions under which they had to attend in order to be evaluated: rest, food, hydration, footwear and clothing. The recommendation was not to perform strenuous exercise on the weekend; on the day of the evaluation not to eat heavy food 4 hours before, the recommendation was two hours before, a snack containing carbohydrates and protein, hydration before, during and after the evaluation, taking into account that on the coast dehydration is greater. Comfortable cotton clothing and shoes that allow normal foot sliding were requested (no non-slip shoes to facilitate pivoting in turns).

The track used was edited in Adobe Audition and consisted of three parts: warm-up, main part and cool-down. For the warm-up, Afro-Latin music was played at 120 beats per minute (bpm) for joint mobility, specific dissociation movements of the hips, trunk and arms, basic Afro-Latin movements with small displacements to raise the heart rate gradually, facilitate changes of direction and be able to engage with the first musical track of the main part, the duration was 7 min.

The main part of the evaluation was designed based on the concepts of Forteza et al. (2013, p.99) and Navarro (1998), cited by López and Fernández (2006). The musical edition was uninterrupted, lasting 43 minutes. The moments of higher intensity were in a range of 1 to 10 minutes alternated with moments of medium or low intensity for incomplete recovery, according to the recommendations of Navarro (1998, p. 106). Incomplete recovery time was a

minimum of 2 minutes or more than 3 minutes, depending on the level of effort made at the moments of greatest intensity.

As recommended by Charola (1996, p.42) as recommended by Charola (1996), beats per minute were used to achieve the intensity changes, for which ranges between 128 bpm to 175 bpm were programmed for the entire session. The bpm between 136 and 175 fell within a 1 to 10 minute duration range for elevating the intensity of effort, alternating with beats per minute between 120 and 128, for incomplete recovery based on Navarro's (1998, p. 106) definitions.

The return to calm was edited with kizomba at 120 bpm using relaxation and breathing movements with a duration of 5 minutes. Participants were asked to perform the arm and hip technique with the best possible quality throughout the session.

The pre- and post-intervention evaluations were performed at the same time (7:00 pm), on the same day (Monday), so that they would have two days of recovery, under the same conditions of rest, food, hydration, footwear and clothing, and with the same musical mix.

Once the pre-intervention evaluation was completed and with a clearer diagnosis of the initial situation of the participants, the training sessions were planned, determining the technical levels of execution for each dance, the intensities and protocols that would be used, the volume of work, the musical editions necessary for the process, the duration and progression of the efforts.

It was detected during the initial evaluation that the participants had very little knowledge of the basic steps of each genre, so the planning had to include a teaching-learning section on the basic arm techniques and steps of salsa, bachata and samba.

Before starting each training session, the objective of the session, the contents and what was expected to be achieved at the end of the training session were explained to the participants; this brief explanation served to educate them about the program, keep them motivated, make them participants in the process and thus generate greater adherence, which would allow the research to be carried out successfully.

### ***Data analysis***

The program used in the research was the SPSS. The data obtained in the present investigation, from the observations of the continuous variable method and endurance, with the evaluations of partial and total fatigue, were compiled in an Excel sheet, both from the partial and total pre-evaluation and from the partial and total post-evaluation. The normality test was performed with the Shapiro Wilks test to determine the distribution of the data and to determine whether they are parametric or nonparametric data, in order to choose the appropriate statistic according to the objectives. Once it was determined that the data were parametric, Student's t test was used for analysis. These data were transferred to the IBM Statistics 23 program and the t Student statistic was used for related samples because they were the same group evaluated in a pre-evaluation and post-evaluation, to compare the means in relation to the research objectives.

## **Results**

The continuous variable method was successfully adapted in the dance therapy classes according to the physical condition and technical knowledge of the participants, since it was found during the pre-intervention assessment that they belonged to a basic level of both training

and dance. Taking this into account and through proper planning, they were able to progress in the technical learning of the dances and in resistance, which allowed them to progress without any inconvenience.

The musical genres that matched the culture and traditions of the participants were selected by means of a verbal survey, prior to the beginning of the research, which allowed us to know their preferences: salsa, bachata, samba, bomba del Chota, merengue, reguetón and soca. This allowed the participants to stay motivated and with greater adherence to the training.

Together with a trained and knowledgeable observer of the process, the participants' resistance was successfully measured prior to the start of the research and at the end of the research. The results of these measurements are presented in tables below. The survey results are expressed in totals and percentages.

Table 1  
*Closed Questions Survey*

Questions	F (%)
do you attend dance therapy classes frequently?	
Yes	20 (100%)
No	0 (0%)
do you consider that you can improve your physical condition and health through dance therapy classes?	
Yes	20 (100%)
No	0 (0%)
do you know of any training methods applied to dance therapy classes that improve endurance?	
Yes	0 (0%)
No	20 (100%)
have you participated in dance therapy classes in which there are no breaks between dances and the intensity is variable throughout the session?	
Yes	4 (20%)
No	16 (80%)
would you like to have dance therapy classes that improve your stamina and health?	
Yes	20 (100%)
No	0 (0%)
would you like to receive more information about a training method applied to dance therapy and the benefits it brings to your health?	
Yes	20 (100%)
No	0 (0%)
do you believe that physical activity and exercise can prevent some diseases?	
Yes	20 (100%)
No	0 (0%)

Note: F, frequency, %, percentage.

**Partial Fatigue**

From the results obtained, it can be seen that there is a significant increase in the resistance observed in the partial fatigue pre-evaluation, with a mean of 12.95 minutes, and the partial fatigue post-evaluation, with a mean of 22.75 minutes, with a confidence level of 0.05, observing a value of  $p = .000$ .

Table 2  
*Paired Samples Statistics*

	Variable	Media	N	Standard deviation	Mean standard error
Par 1	PreCanPartial	12,9500	20	7,47962	1,67249
	PostCanPartial	22,7500	20	7,09985	1,58758

Note: N, number, PreCanPartial, Pre partial fatigue, PostCanPartial, Post partial fatigue.

Table 3  
*Paired Samples Correlations*

	Variable	N	Correlation	Sig.
Par 1	PreCanPartial & PostCanPartial	20	,953	,000

Note: N, number, Sig, significance, PreCanPartial, pre partial fatigue, PostCanPartial, Post partial fatigue.

Table 4  
*Paired Samples Test*

Variable	Media	Standard deviation	Matched differences		T	l	Sig. (bilateral)	
			Media from error standard	95% interval trusted of the difference				
				Inferior				Superior
Par 1 PreCanPartial-PostCanPartial	-9,80000	2,26181	,50576	-10,85856	-8,74144	-19,377	19	,000

Note: t, t-statistic, SD, standard deviation, gl, degrees of freedom, Sig, significance, PreCanPartial, PrePartial fatigue, PostCanPartial, PostPartial fatigue.

**Total Fatigue**

From the results obtained, it can be seen that there is a significant increase in the resistance observed in the pre-evaluation of total fatigue, with a mean of 19.80 minutes, and in the post-evaluation of total fatigue, with 30.40 minutes, with a confidence level of 0.05, observing a value of  $p = .000$ .

Table 5  
*Paired Samples Statistics*

	Variable	Media	N	Standard deviation	Mean standard error
Par 1	PreCan Total	19,8000	20	6,84874	1,53143
	PostCan Total	30,4000	20	8,37540	1,87280

Note: N, number, PreCanTotal, pre total fatigue, PostCanTotal, Post total fatigue.

Table 6  
*Correlation of Paired Samples*

	Variable	N	Correlation	Sig.
Par 1	PreCanTotal & PostCanTotal	20	,948	,000

Note: N, number, Sig, significance, PreCanTotal, PreTotal fatigue, PostCanTotal, PostTotal fatigue.

Table 7  
*Paired Samples Test*

Variable	Media	Standard deviation	Matched differences		T	gl	Sig. (bilateral)	
			Media from error standard	95% interval				
				Inferior				Superior
Par 1 PreCanTotal - PostCanTotal	-10,60000	2,87274	,64236	-11,94448	-9,25552	-16,502	19	,000

Note: t, t-statistic, gl, degrees of freedom, sig, significance, PreCanTotal, PreTotal fatigue, PostCanTotal, PostTotal fatigue.

### Discussion and conclusions

So far, there is no information available regarding the benefits of the continuous variable method applied in aerobic dance classes for the improvement of endurance, this being the first to be carried out, but there are studies such as Labrador et al. (2021), in which they agree with other research on the application of an aerobic endurance training method with work phases above the anaerobic threshold and active recovery phases interspersed as the most effective for improving the functional capacity of patients with acute coronary syndrome, as opposed to the continuous harmonic method of constant intensity, also mentioning the safety that this method presents, since it does not have sudden passive rest interruptions that can produce possible arrhythmic events, thus demonstrating the benefits of the continuous variable method. Comparing it with the present study, it was possible to effectively demonstrate an improvement in the basic physical endurance capacity of the research participants and therefore an improvement in their physical condition.

Observation of the data shows that there is a significant increase in both the evaluation of partial fatigue and total fatigue. Based on these findings, the null hypothesis is rejected and the alternative hypothesis is accepted, which establishes that the application of the continuous variable method in the planning of the dance therapy classes improves the resistance of the participants. These results are in line with Rubio and Cano (2021), who concluded that the application of the variable continuous *fartlek* method in a group of mountain trail runners improves aerobic endurance, giving greater running capacity and improving both the maximum aerobic speed and the maximum aerobic power of each athlete.

In relation to the time of partial fatigue pre and post intervention, the results obtained were very important, with a notable improvement. The data confirm that the mean partial fatigue before the application of the continuous variable method was 12.95 minutes and at the end of the intervention it was 22.75 minutes. Another author who seconds this result obtained in the research is Conlago (2019), who expresses that by applying fartlek training in athletes preparing for the marathon using constant changes of rhythm and going from the aerobic to the anaerobic threshold, it was possible to improve the physical condition, therefore, the increase of Vo2 Max, evaluated through Fisher's test.

Another result obtained from the present investigation was a significant increase in the mean total fatigue. The data show that before the intervention, total fatigue averaged 19.80 minutes and after the intervention, it averaged 30.40 minutes. According to Vrijens (2006), endurance is "the ability to sustain dynamic or static work for as long as possible". These results confirm that there was an improvement in this capacity by increasing the dynamic work time before reaching total fatigue as a result of the application of the continuous variable method.

Ulloa(2020), carried out a study in which the improvement in the physical capacities of endurance is confirmed, in addition to allowing a playful work in senior soccer players when using this modality of continuous variable method (fartlek), which is comparable with the benefits obtained by the participants of the research, in terms of the improvement of endurance and the fun of training under the continuous variable method.

Dancing is currently considered a tool to improve health, in this study 100% of the participants consider that this activity can improve their physical condition and health. This result is supported by studies such as those of Rodríguez et al. (2021), who when evaluating the benefits of dance therapy combined with Tae Bo, obtained a decrease in BMI values, weight in kilograms, skin folds, and abdomen-waist diameter. In addition to this, a decrease in heart rate and in the results of the Ruffier-Dickson functional test, which evidences the improvement of the functions of the cardiovascular system. In this same study, it was determined that greater adherence to dance therapy is generated through the use of dance music with rhythms that are heard on the radio and national television and are danced to at parties and popular activities; this result was also observed in the present study in which the participants felt more motivated and in certain cases shouted or chanted during the session when listening to the songs of their preference.

In another research carried out by Avila and Murcia (2021), the positive effect generated by electronic music in a resistance training with first semester university students was determined, which ratifies the results obtained on the frequency with which the participants attend the dance therapy training (100% attend frequently), as music is one of the elements that dance needs to facilitate motivation and adherence.

In a study by Jiménez et al. (2015), to measure the benefits of dance therapy and its impact on vulnerability to stress, found the appreciation of the low levels of satisfaction of the sample under study by the activities they practiced due to their poor relationship with their tastes and preferences before the implementation of the program. This result is closely related to the results of the present investigation, in which 100% of the participants stated that they frequently attend dance therapy classes, thus confirming the high levels of motivation that the participants of the study have for this activity and the importance of offering programs that are in accordance with the tastes and preferences of the practitioners.

According to Salinas (2018), sport specialists have a great responsibility towards their clients, part of those responsibilities are: to systematically teach and communicate ideas and notions, to provide information to the practitioner about the benefits of physical exercise and

the positive impact on quality of life. In relation to this explanation, the present study effectively detected that 100% of the research participants would like to receive more information about some training method applied to dance therapy and the benefits it brings to their health.

100% of the participants believe that physical activity and exercise can prevent some diseases, this result is supported with the study of Gonzalez and Rivas (2018), which indicates that there is strong scientific evidence, which supports the benefits of physical activity and exercise, on women's health in more than twenty-five medical conditions, including cardiovascular disease and premature mortality, producing beneficial effects on the immune, hemostatic, autonomic, metabolic and hormonal systems among others.

Villaquirán et al. (2020), in their research, conclude that the results found in their study were favored by performing a correct design and prescription of the exercise, which validates the present study that adapted the training method to the characteristics of the participants, taking into account that resistance training methods have been studied more in the field of competitive sport and high performance.

Unlike the studies mentioned in this section, the present research focuses on the benefits obtained in the improvement of endurance by applying the continuous variable method in dance classes. The results obtained from the research promote the main question of the study, about the incidence of the application of the continuous variable method in the planning of the dance therapy classes to improve the resistance of the participants.

### **Conclusions**

The efficacy of the the proposal of application of the continuous variable method in the dance therapy classes to achieve the improvement of the participants' resistance is proved to be effective. As for determining the concepts, types of resistance and characteristics of the continuous variable method, it was verified that they facilitate their application at the time of planning the dance therapy classes in accordance with the objectives set out in them and in search of an improvement in the resistance and physical condition of those who participate in these classes, avoiding improvisation in this type of training.

Measuring the initial level of resistance of the participants of the dance therapy classes allows the correct application of the variable continuous training method and the correct monitoring of progress, which results in greater motivation on the part of the participants knowing that they are constantly being evaluated and in the achievement of the objectives in terms of reaching a better resistance at the end of a training period. Likewise, the correct selection of musical genres, adjusting them to the culture and traditions of the participants, allows for greater motivation, adherence to the program and therefore progress over time.

It was found that adapting the continuous variable method to the characteristics of the participants allows gradual progress in the loads, generating adherence to the training and avoiding possible injuries. On the other hand, the continuous variable method adapts favorably to dance classes, being a very good option if you want to improve the resistance of the people who participate in this type of sessions.

It is concluded that the continuous variable method produces beneficial effects for health and the improvement of endurance by increasing the capacity to maintain a dynamic work as long as possible to maintain dynamic work for as long as possible.

It is recommended, for future studies, to carry out a control through variables such as heart rate or maximum oxygen consumption, in order to enhance the results of the research. Likewise, it would be convenient, research on other resistance training methods that can be applied to aerobic dance classes to respond to the different objectives and needs of individuals. On the other hand, it is convenient to carry out evaluations at the end of each planning period,

contrasting the results with the initial evaluation in order to make improvements, changes or continue with the medium and long term plan

Based on the objectives and the hypothesis proposed in relation to the participants from Pedro J. Montero Parish of Yaguachi Canton, it is suggested that through the National Police of Ecuador, the Community Police of Yaguachi Canton and the parish GAD, training for coaches, instructors and monitors should be carried out through talks or workshops on the application of the continuous variable method in the planning of dance therapy classes for the improvement of resistance. In the same way, and based on the results obtained, it is recommended to design a manual on the application of the continuous variable method in the planning of aerobic dance classes to improve the endurance of the participants.

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