

Impact of a Twelve-Week Freestyle Dance Program on Cardiovascular Fitness in College Women

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Abstract:

This study aimed to assess the impact of a twelve-week (three sessions per week, totaling 36 sessions) freestyle dance program on the Cardiovascular fitness of college women. Twenty female students aged 17-23 from Bhairab Ganguly College, Belgharia, West Bengal, were randomly selected for this study, which used a single-group design. The 600-yard run-walk test was used to measure cardiovascular fitness. Data were analyzed using the t-test at a 0.05 significance level. Results showed that the twelve-week freestyle dance program significantly improved cardiovascular fitness levels among the participants.

Keywords: Freestyle dance, cardiovascular fitness, 600-yard run-walk test.

Introduction

Freestyle dance is spontaneous and expressive, with no prescribed movements, making it a popular choice for recreation and competition among both genders. Originating in the disco era of the 1970s, freestyle dance allows dancers to showcase their creativity and individual style through a mix of various dance forms. Freestyle dancing improves self-esteem, coordination, creativity, and attention while helping to control body weight, reduce cardiovascular disease risk, and enhance cardiovascular fitness.

Cardiovascular fitness refers to the heart and lungs' ability to supply oxygen-rich blood to muscles during physical activity, which supports energy production and endurance. It is a vital component of overall physical health, influenced by factors such as heart rate, stroke volume, cardiac output, and maximal oxygen consumption.

Methods

This study aimed to determine how a structured freestyle dance regimen could enhance cardiovascular fitness in college women. A sample of twenty students aged 17-23 from Bhairab Ganguly College was selected randomly. A twelve-week dance program was designed, consisting of three 20-minute freestyle dance sessions per week, each preceded by a 10-minute warm-up.

Cardiovascular fitness was measured using the 600-yard run-walk test, administered before and after the program. A t-test was used to analyze the pre- and post-test results, with significance set at 0.05 to assess any statistical differences.

Results

Table 1: Mean Scores and 't' Ratio for Freestyle Dance Group

Variable	Pre-Test	Post-Test	't' Ratio
600-yard run-walk	5.5345	5.0458	0.021

Significant at the 0.05 level.

The results show that the p-value (0.021) is below the alpha level of 0.05, indicating a significant difference between the pre- and post-test means. The null hypothesis is therefore rejected, demonstrating that the freestyle dance program significantly improved cardiovascular fitness.

Conclusion

Based on the analysis, a twelve-week freestyle dance program has a significant positive effect on cardiovascular fitness in college women.

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