

Summary

Zone Fit Ltd received funding from The Sporting Chance Initiative to employ the services of Robert Gordon University (RGU) to scientifically measure heart rate activity as well as the amount of calories burnt during The Fit Zone™ Group Exercise Programme (45 minute format), and to compare the data with results from other published studies of a similar nature i.e. running on a treadmill, step aerobics, aerobics, Body Attack (Les Mills Body Training Systems). RGU's research proposal and the results of their research are available on request.

Furthermore, a study was run independently by Zone Fit Ltd using the data collected for analysis by RGU. Information was obtained from volunteers participating in 55 minutes of Step Aerobics, 45 minutes of Body Attack and 30/45 minutes of The Fit Zone™ Group Exercise Programme. A number of the volunteers participated in 3 or more sessions of the same exercise activity and in 2 or more activities in order that comparisons could be made.

Conclusions

Results for volunteers participating in 3 or more sessions of The Fit Zone™ Group Exercise Programme (30 and 45 minutes) were consistent and the 45 minute programme showed similar results with regards to calories burned and heart rate training zones in comparison to a 45 minute Body Attack session.

Participants worked for the majority of our programme in moderate to hard heart rate zones. This aligns itself to current guidelines for effective cardiovascular heart rate training.

Description	FZ	FZ
	45 mins	30 mins
Overall Heart Rate Activity		
Avg % HR for duration of the activity	74%	74%
Overall Average Time in Heart Rate Zones		
% Max HR Zones	6	5
% Hard HR Zones	10	8
% Moderate HR Zones	13	9
% Light HR Zones+++	18	15

+++ These figures align themselves with a 10 minute warm up and 8 minute cool down for a 45 minute class and 5 minute cool down for a 30 minute class.

Recommendations

The Fit Zone™ Group Exercise Programme was developed and designed by Zone Fit Ltd to be a multi-level cardiovascular exercise programme easily adapted to different fitness and functional levels and environments.

From the information obtained from the trial and analysis of the data from the Polar software, small modifications will be made to our programme to shorten the warm up and intensify some of the choreography variations to ensure participants are working more effectively in moderate to hard rate zones.

Further Research

Further research will be undertaken by Robert Gordon University to compare heart rate activity, calories burned and also the biomechanics of undertaking The Fit Zone™ Group Exercise programme in a more controlled environment than the trial at David Lloyd Leisure. Eighty volunteers familiar with group exercise and our programme will be recruited. These volunteers will undertake the same movement sequences on the floor, on a Reebok step using one riser and in The Fit Zone™ at Zone 2 height setting (floor and force plate).

