

RESEARCH DESIGN The study was conducted in a laboratory setting. The participants were 30 university students (15 males and 15 females) who were recruited from a local university. The participants were randomly assigned to three groups: the control group, the low-intensity group, and the high-intensity group. The control group performed a series of cognitive tasks without any physical activity. The low-intensity group performed the same cognitive tasks while walking at a slow pace (approximately 3 miles per hour). The high-intensity group performed the same cognitive tasks while walking at a fast pace (approximately 4 miles per hour). The study was approved by the local ethics committee.

RESULTS The results of the study showed that the high-intensity group performed significantly better on the cognitive tasks compared to the control group and the low-intensity group. The high-intensity group showed a significant increase in heart rate and energy expenditure during the tasks, suggesting that the physical activity was more intense. The low-intensity group showed a smaller increase in heart rate and energy expenditure compared to the control group. The control group showed no change in heart rate and energy expenditure during the tasks. The results suggest that high-intensity physical activity can improve cognitive performance, while low-intensity physical activity has a smaller effect. The control group showed no effect on cognitive performance.

CONCLUSIONS

The study concludes that high-intensity physical activity can improve cognitive performance, while low-intensity physical activity has a smaller effect. The control group showed no effect on cognitive performance.

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