

Summer 2019 article and quiz for 1 CSEP PDC/1 FNB CEC

## Read the Article: High tempo music prolongs high intensity exercise

Meaghan E. Maddigan, Kathleen M. Sullivan, Israel Halperin, Fabien A. Basset and David G. Behm

## PeerJ Preprints: July 23, 2018: Pages 1-15

Answer the questions below, save the document to your computer and submit to executivedirector@fitnessnb.ca on or before April 30, 2019

## Please Note: If using Firefox or Google Chrome you will need to convert to a fillable form:

Left click on download (top right corner third lcon). Choose Adobe Reader and wait for converted form.

1. Which is NOT an explanation as to why music is able to promote ergogenic and psychological benefits during exercise?

- a) music will alter psychomotor arousal therefore acting as a stimulant during physical activity
- b) music allows the brain to fire neurons at a faster velocity allowing exercise to become more comfortable
- c) music may allow individuals to separate thoughts from feelings, changing unpleasant feelings and reducing sensations of fatigue
- d) individuals are predisposed to respond to rhythmical elements making physical activity more harmonious
- 2. High exercise intensities are affected more by \_\_\_\_ and less by \_\_\_\_\_.
  - a) central fatigue, peripheral fatigue
  - b) respiratory fatigue, neurological fatigue
  - c) peripheral fatigue, central fatigue
  - d) weakness, fatigue
- 3. What type of high intensity exercise did the participants complete?
  - a) running
  - b) cycling
  - c) swimming
  - d) boxing
- 4. Heart rate was \_\_\_\_\_% higher in music condition across the four time points
  - a) 1
  - b) 2
  - c) 3
  - d) 4
- 5. What was the difference between the rate of perceived exertion in the music condition and non-music condition?
  - a) higher rate in music condition
  - b) lower rate in music condition
  - c) higher rate in non-music condition
  - d) no statistically significant difference

High intensity exercise participants with high tempo music exercised longer than those in non-music condition. 6.

- 11.3% a)
- 10.7% b)
- 9.6% C)
- d) 3.8%
- 7. Breathing frequency is controlled by the:
  - central motor drive a)
  - autonomic nervous system b)
  - peripheral nervous system C)
  - all of the above d)
- 5 minutes post high intensity exercise, HR in the music conditions were \_\_\_\_\_ than those in non-music condition. 8.
  - significantly lower a)
  - significantly higher b)
  - insignificantly lower c)
  - not significantly different d)
- High tempo music had a statistically significant effect on high intensity exercise in: 9.
  - ventilation a)
  - breathing frequency b)
  - blood lactate C)
  - d) all of the above
- Based on this study, high tempo music can lead to 10.
  - a) greater performance with increased perceived exertion
  - lack of effort in the exercise b)
  - greater performance without increased perceived exertion c)
  - d) change of mood

Fitness!...For Fun!...For Life!...Forever!/Conditionnement physique pour le plaisir, pour la vie, pour toujours!