Dancers Assessments with Face Mask Testing

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BACKGROUND

Wearing face masks has been shown to have little effect on exercise performance.1 No research however exists on the effects of face mask wearing during dance performances.

- Dancers may perceive face mask wearing differently due to the unique nature of dance movement, and due to the differences between dance classes and performances.2 3

PURPOSE

To determine: 1) perceived and 2) measured effects of face mask wearing in university level contemporary dancers during a multi-stage, incremental, dance-specific aerobic field test (DAFT). (REB21-1612)

METHODS

University contemporary dance students: enrolled in the same course at the UofC, aged 18-30 years (N=30) were recruited to participate over one academic semester. Inclusion criteria: Had not previously completed the DAFT. Pre-participation: Get-Active (CSEP) questionnaire and 11 item Perception of Face Mask Wearing (5-point Likert Scale; Strongly Disagree – Strongly Agree)4 survey were administered.

Participation: Two trials (T1; T2) of the DAFT were completed while wearing disposable 3-ply face masks.

Dependent Variables: Heart rate (HR; bpm) and Rating of Perceived Exertion (RPE) were recorded following each of the 5 stages of the DAFT. Delayed Onset of Muscle Soreness (DOMS), was recorded 48 hours post each of the trials.

Analysis: Paired t-test (p ≤ 0.05) were run to compare differences in HR, RPE and DOMS between trials.

RESULTS

Participants: n=15, age range 18-21 years

Perception of Face Mask Wearing Questionnaire:
- 93% (n=14) reported experiencing shortness of breath while dancing in a face mask
- 87% (n=12) reported having difficulty dancing for prolonged periods of time while wearing a face mask
- 53% (n=8) reported decreased stamina
- 40% (n=6) reported increased fatigue

Dependent Variables Figures 1,2, and 3:
- HR: No significant difference following Stages 2, 4 and 5
- RPE: No significant difference following Stages 2-5
- DOMS: significantly different between T1 and T2 (p = 0.03)

REFERENCE