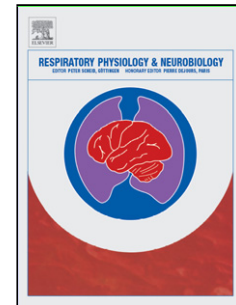


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## The association between cardiorespiratory fitness and pulmonary diffusing capacity

<sup>1</sup>Gerald S. Zavorsky, <sup>2</sup>James M. Smoliga

<sup>1</sup>Department of Respiratory Therapy, Georgia State University, Atlanta, Georgia, United States

<sup>2</sup>Department of Physical Therapy, High Point University, High Point, North Carolina, United States

### Correspondence:

**Gerald S. Zavorsky, Ph.D., ACSM-RCEP, RPFT, FACSM**

Associate Professor

Department of Respiratory Therapy

Georgia State University

Urban Life Building, Room 1229 (12th Floor)

Atlanta, GA, 30302-4019

Office phone: 404-413-1271

Lab phone: 404-413-1317

Fax: 404-413-1230

e-mail: [zavorsky@gsu.edu](mailto:zavorsky@gsu.edu)

### Highlights

- The odds of being > 97.5<sup>th</sup> percentile for *DL*,NO increase by 6x if one is ≥ 80<sup>th</sup> percentile in aerobic fitness
- Subjects > 97.5<sup>th</sup> percentile for *DL*,NO & *DL*,CO had a higher  $VO_{2peak}$  compared to subjects < 97.5<sup>th</sup> percentile
- 65-68% of the variance in *DL*,NO & *DL*,CO measured at rest is shared with  $VO_{2peak}$
- After controlling for confounders, the shared variance between *DL*,NO vs  $VO_{2peak}$  decreased to 16%
- Possible reasons for a small shared variance: training status, sport preference, exposure to chronic hypoxia during childhood, & genetics

### Abstract

Pulmonary diffusing capacity for nitric oxide (*DL*,NO) and carbon monoxide (*DL*,CO) measured at rest (mL/min/mmHg) is strongly associated with aerobic capacity (cardiorespiratory fitness or

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