

Impacts of Long COVID on Physical Performance in People with Intellectual Disabilities

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Introduction

Long COVID affects different aspects including **physical performance** in healthy people¹. It may also post additional prolonged negative impacts on individuals with **intellectual disabilities (ID)**². However, what are the effects of long COVID on physical performance in individuals with ID?

Method

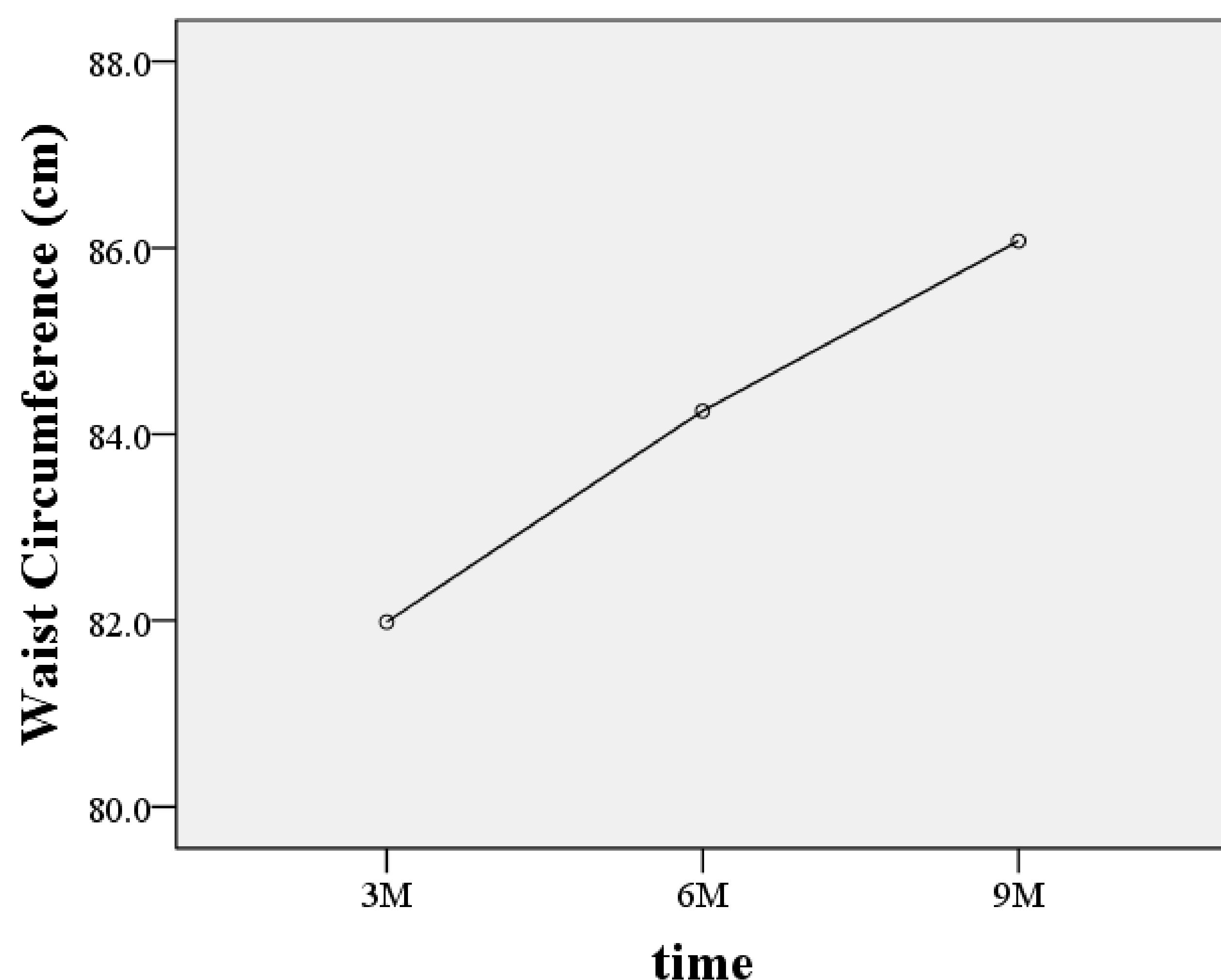
There are 20 individuals with ID (mean age= 49.20±10.91 years old) including 18 males and 2 females. Sixty five percent of them were moderately-disabled intellectually. On average, they spent 9.70 days (*SD*=1.90) in hospitals during infection. Before infection, all of them had received 2 doses of vaccine, of which more than half of them received Sinovac vaccine whereas the rest received BioNTech.

Physical performance assessments were conducted on **post 3-month, 6-month & 9-month** after COVID infection. These included the measurement of Body Mass Index, Waist Circumference, Handgrip Strength, Sit-and-reach Test, Five Times Chair Stand, 30-second Chair Stand (30sCS), Static Balance Test, 4-meter Walk Test, Stick Catching Test (Stick C) and 6-minute Walk Test.

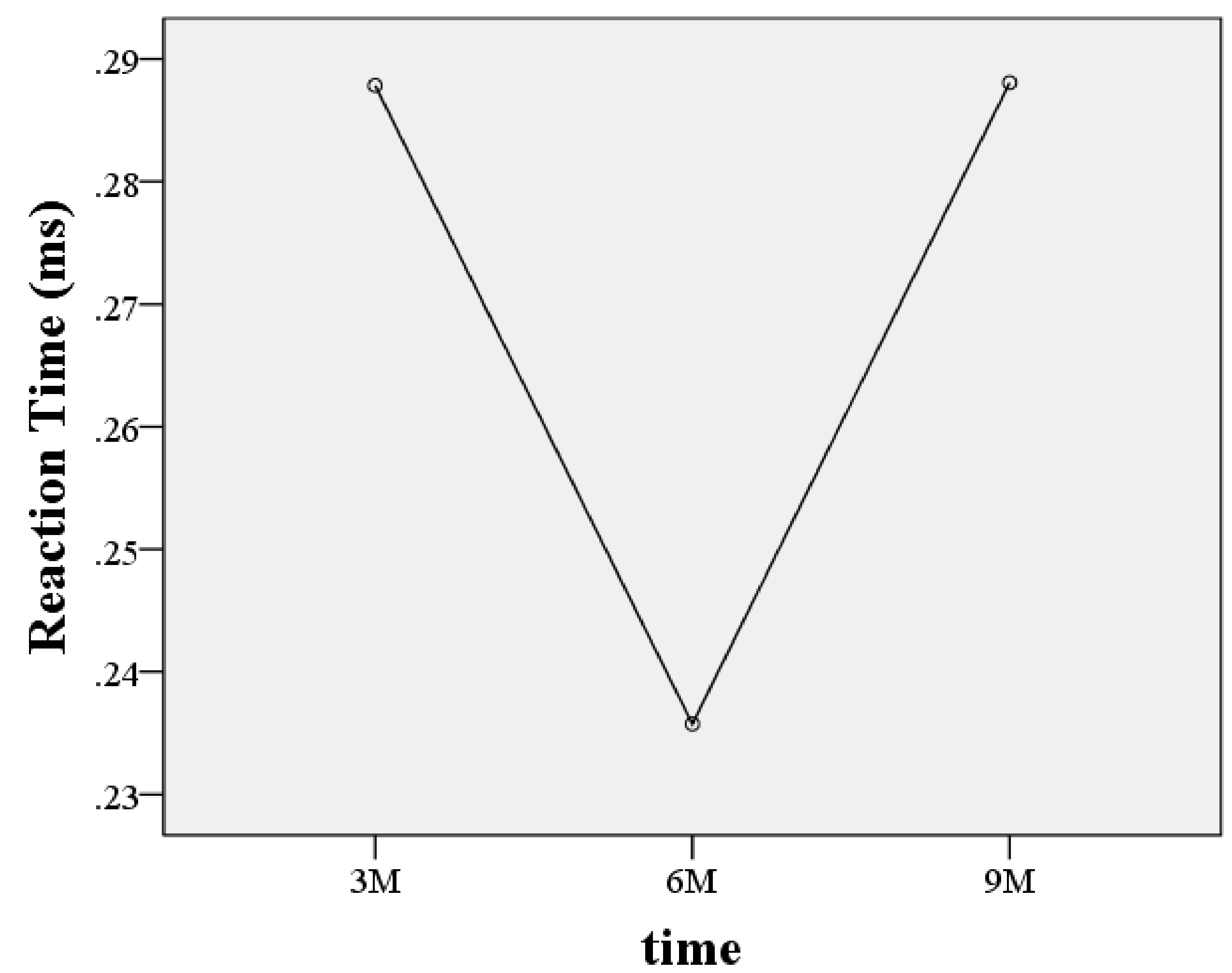
Results

Subjects had **significant increases in waist circumference** ($p = .01$) from 82.0 cm to 86.1 cm, which accounts for an **overall 5% increase**. Their **reaction time** also rose significantly over the study period.

Waist Circumference



StickC



Discussion

It was observed that subjects gained weight significantly throughout the period. They also responded slightly slower after COVID. In general, long COVID symptoms would more likely to worsen **body composition and reaction time** of ID individuals.

References

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2. Courtenay, K., & Perera, B. (2020). COVID-19 and people with intellectual disability: impacts of a pandemic. *Irish Journal of Psychological Medicine*, 37(3), 231-236.