



Education, Engagement and Empowerment in the North East Inner City

CHILDS Play: Effect of Exercise on Aerobic Fitness and Atherosclerotic Cardiovascular Disease in Children Attending a Deis School

Kevin O'Brien, Sarah M. Kelly, Neil W. Morice
School of Health and Human Performance, Dublin City University
kevin.obrien@dcu.ie, sarah.kelly@dcu.ie, neil.morice@dcu.ie

INTRODUCTION
Cardiovascular disease (CVD) is increasingly associated with atherosclerotic cardiovascular disease (ACVD) (Pala et al., 2019). Children from lower socioeconomic, disadvantaged areas at increased risk early exposure to ACVD risk factors (Sternberger et al., 2019). This study evaluated the effect of a 4-week exercise program on CVD-related risk factors and additional measures of ACVD in four-year boys and girls attending a DEIS post-primary school.

METHODOLOGY

```
graph TD; A[Participants (n=24)] --> B[Random Allocation]; B --> C[Control Group (n=12)]; B --> D[Exercise Group (n=12)]; C --> E[Baseline Measurements]; D --> E; E --> F[4-week exercise program]; F --> G[Post-intervention Measurements]; G --> H[Final Analysis];
```

Kevin O'Brien