

# Effectiveness of **ACT** in promoting PHYSICAL ACTIVITY & PHYSICAL FUNCTION

## A systematic review



UNIVERSITY OF  
GOTHENBURG

**Kirsi Nurmi**  
Programme in Medicine,  
Sahlgrenska Academy,  
University of Gothenburg,  
SWEDEN

**Bright Nwaru**  
Krefting Research Centre,  
Institute of Medicine,  
University of Gothenburg,  
SWEDEN

**Graciela Rovner**  
Div. of Physiotherapy,  
Department of Clinical Sciences,  
Karolinska Institutet, Stockholm,  
SWEDEN



**Karolinska  
Institutet**

## Acceptance and Commitment Therapy (ACT)

= a *behavioral therapy* with strong evidence for establishing **sustainable behavioral & life-style changes** in patients with chronic disease and the general population

Is ACT effective to increase...?

... and how are PA and PF measured by ACT- researchers ?

### Physical Activity (PA)

*muscle produced movement resulting in exceeded energy consumption*

#### Prevents & treats:

- ♥ Cardiovascular disease
- ♥ Muskuloskeletal disease
- ♥ Psychiatric conditions
- ♥ Diabetes
- ♥ Cancer
- ♥ Osteoporosis

### Physical Function (PF)

*ability to perform tasks using the body*

#### Helps to achieve and maintain:

- ♥ High Quality of Life
- ♥ Independence
- ♥ Sports performance

Objectively or  
by self-rating?



### GUIDELINES: Cochrane Handbook & PRISMA

SEARCHES: CINAHL, Pubmed, PsycINFO, Scopus & manually

#### Inclusion criteria:

- ✓ Original article or thesis
- ✓ ACT- or acceptance-based intervention
- ✓ Human adult population
- ✓ Pre- and postintervention measures for PA or PF
- ✓ English language

**26 articles**

of moderate or high quality



### ACT can improve PA in:

- 👍 Females struggling with their weight and sedentarism
- 👍 Colorectal Cancer- survivors and those with diabetes

### ... but probably not in those with:

- 👎 Chronic pain, cardiac morbidity and previous bariatric surgery

### ACT can also improve PF in:

- 👍 Patients with chronic pain
- 👍 Sedentary females (cardiorespiratory fitness)
- 👍 Elite-athletes (self-assessed performance)

### Measurements of varying quality:

- 👍 objective (accelerators and fitness tests)
- 👎 subjective (self-rating and questionnaires)

### Conclusion:

### ACT- research could benefit from:

- 👎 including PA & PF as a primary outcome
- 👎 using consistent, observational measures to assess potential improvements in PA and PF

## TAKE HOME MESSAGE

ACT is a promising method to **improve PA & PF** in sedentary and obese women, patients with chronic pain, diabetes patients, cancer survivors and athletes.

