

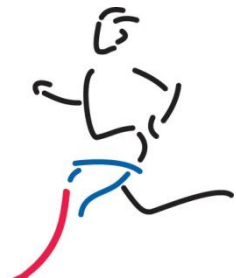


University of
Strathclyde
Glasgow

Motivations & Barriers to Participation in Exercise & Sport: A review of the literature

Sarah Deans, MSc

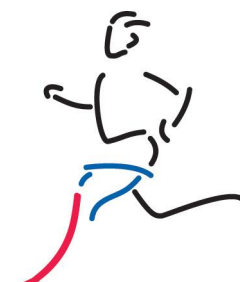
The National Centre
to PROSTHETICS and ORTHOTICS





BACKGROUND

SPEEAD - **S**porting **P**rosthesis for **E**veryday & **E**lite **A**thletes with a **D**isability



AIMS & OBJECTIVES

**Physical Activity in the Amputee
Population**

Motivations and Barriers

Critical Relevance



METHODOLOGY

Databases

Search Strategy

**Studies
considered**

Review methods

SUBJECT HEADINGS & KEYWORDS

**Amputation, amputee,
amput*, prosthe***

**Sports, exercise, physical
activity, exercise therapy,
physical training,
physical fitness**

**Motivation, self efficacy,
self esteem, attitude, self
concept, participation,
motiv***

METHODOLOGY

Screening

Inclusion Criteria

Acquired or congenital
amputation
Peer reviewed journals
Written or translated into
English
No limits on publication
year
No limits on participant
numbers

Exclusion Criteria

Mixed populations
Studies which reported
swimming without
prosthesis
Newsletter articles



RESULTS

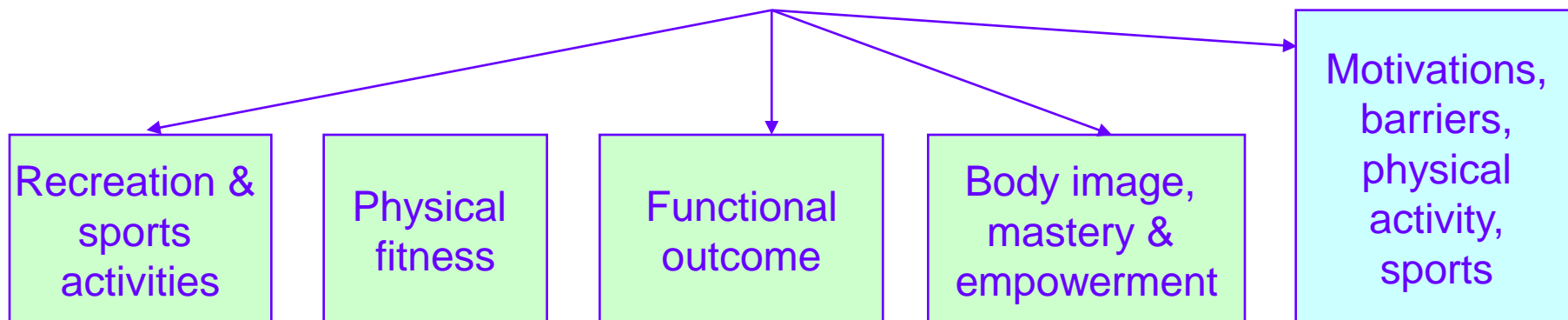
**Keyword search
n=503**

**Duplicates removed
n=361**

**Articles meeting
inclusion criteria
n=19**



Thematic Groups





DISCUSSION

- Kegel, 1980.** Recreational activities of lower extremity amputees: a survey. *Archives of Physical Medicine & Rehabilitation*, 61: 258 - 264
- Rubin & Fleiss, 1983.** Devices to enable persons with amputation to participate in sports. *Archives of Physical Medicine & Rehabilitation*, 64 (1): 37-41
- Harney, 1995.** Amputees in athletic sports. *Physiotherapy in Sport*, 18 (3): 6-7
- Webster, Levy, Bryant, Prusakowski, 2001.** Sports and recreation for persons with limb deficiency. *Archives of Physical Medicine & Rehabilitation*, 82 (3): S38-44

Munin, Espejo-De Guzman, Boninger, Fitzgerald, Penrod, Singh, 2001. Predictive factors for successful early prosthetic ambulation among lower limb amputees. *Journal of Rehabilitation, Research & Development*, 38 (4): 379-384

Nehler, et al, 2003. Functional outcome in a contemporary series of major lower extremity amputations. *Journal of Vascular Surgery*

Trantowski-Farrell & Pinzur, 2003. A preliminary comparison of function and outcome in patients with diabetic vascular dysvascular disease. *Journal of Prosthetics & Orthotics*



DISCUSSION

10 participants with traumatic
amputation

Motivations – universal & unique
benefits

Barriers – physical, psychosocial,
societal

Berbrayer, 2004. Motivations & barriers to sports participation for adults amputees. *American Journal of Physical Medicine & Rehabilitation*. 83 (3): p232-232



CONCLUSIONS

Younger people with traumatic amputation are generally involved in sports.

How do we empower the older person with amputation and co-morbidity to participate in physical activity, exercise and sports?

Let research on the 'normal' population inspire and inform us.



Scottish Physical Activity Research Collaboration

<http://www.sparcoll.org.uk>

Acknowledgements

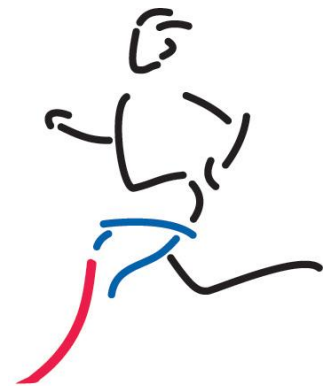
Engineering & Physical Sciences Research Council
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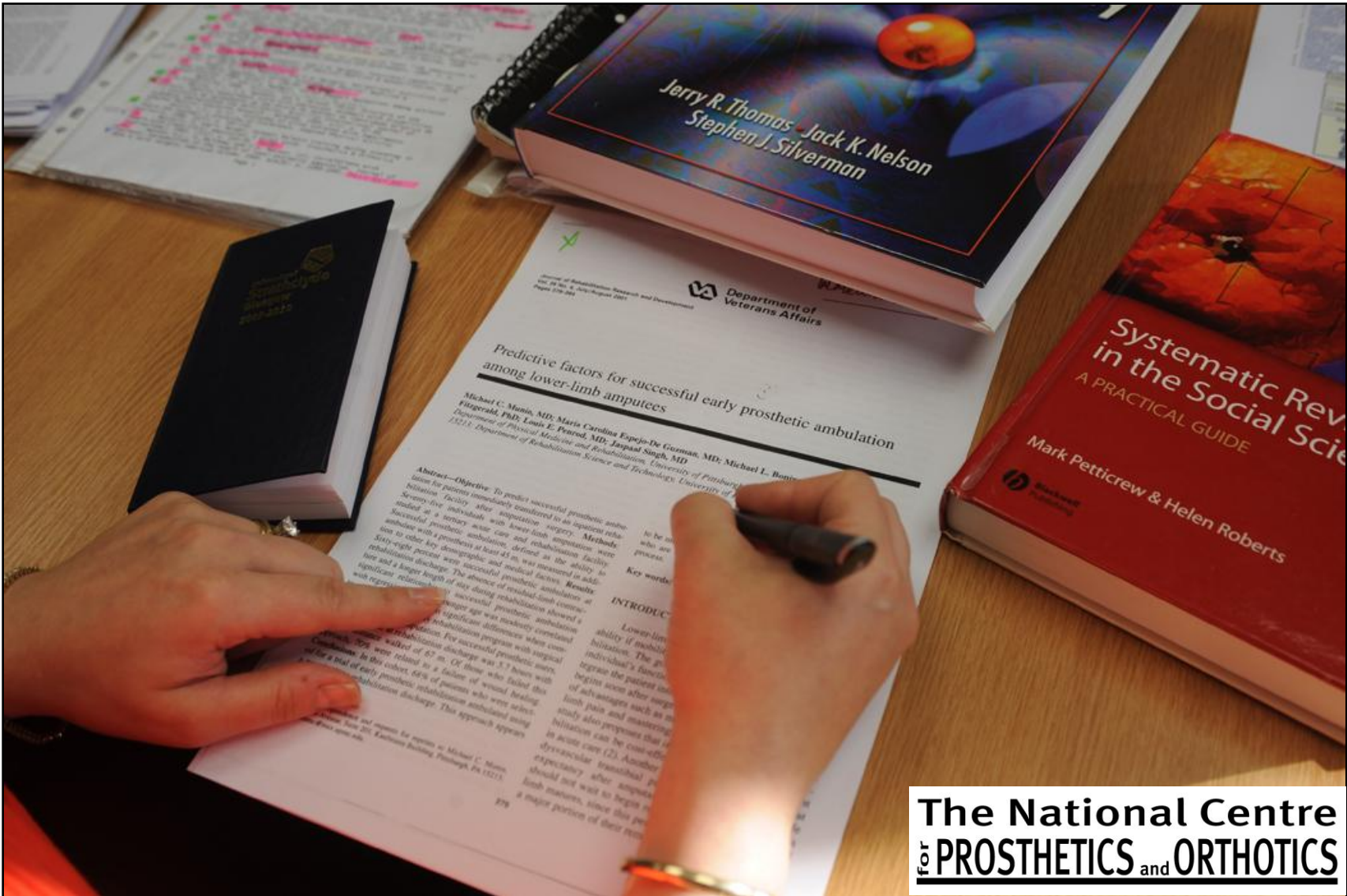
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www.strath.ac.uk/prosthetics/research/speedsportingprosthetics



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