

# Writing a Systemic Review



# See Journal of Sport Sciences

## Instructions to Authors

[http://www.tandfonline.com/action/  
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# Structure / heads of the Article

1. Title page & Summary / Abstract
2. Introduction
3. Methods for systematic review
4. Results
5. Discussion
6. Conclusions
7. Acknowledgements
8. Conflicts of Interests Statement
9. References

# Title page & Summary / Abstract

Title

Author

Summary

- Overview of the review including a statement, or more from each section.
- Strong emphasis on findings or conclusions.

Keywords –these should include your word used in your literature search.

Write your exact title at the end as only then do you know what you found!

# Abstract

It has been suggested that conditioning programmes have the potential to improve golf performance through fitness adaptations. The primary aim of this systematic review was to evaluate the effectiveness of conditioning programmes on measures of golf-related fitness and golf performance. Four electronic library databases were searched and the quality of the studies was assessed using criteria adapted from the Consolidated Standard of Reporting Trials statement. Thirteen studies satisfied our criteria for inclusion. Nine studies involved middle-aged to older male recreational golfers and four studies used younger more skilled golfers. Conditioning programmes involved the use of machine weights, free weights, medicine balls, and elastic bands, and most studies included a flexibility component. Most studies assessed changes in fitness characteristics and generally resulted in improvements. All but two of the studies assessed changes in club head speed and reported increases. The findings from this review suggest that strength and conditioning programmes can have a positive effect on the golf swing and fitness characteristics of golfers. The majority of studies in this review evaluated the effects of generic conditioning programmes on fitness characteristics and club head speed. Future studies should investigate the effects of more golf-specific strength and conditioning programmes to improve fitness and overall golf performance.

Keywords: Golf, strength, strength and conditioning, flexibility, range of motion, physiology, resistance training, exercise, balance, physical fitness.

# Introduction

- Put your research into context
- Consider it a standard literature review
- Include any theoretical understanding required to understand the article.
- State the scale and scope of the review.
- Develop towards the specific research question.

# Final Paragraph of Introduction

.....Consequently, the primary aim of this systematic review was to evaluate conditioning programmes and their effectiveness on measures of golf-related fitness and golf performance. A secondary aim was to evaluate the quality of existing studies and the impact of study quality on the interpretation of results.

# Methods

- Strategies and procedures for searches
- Inclusion / exclusion criteria
- Data Analysis
- Summary of studies found
- Categorisation of studies – including hierarchy structure.
- Coding of findings into defined categories

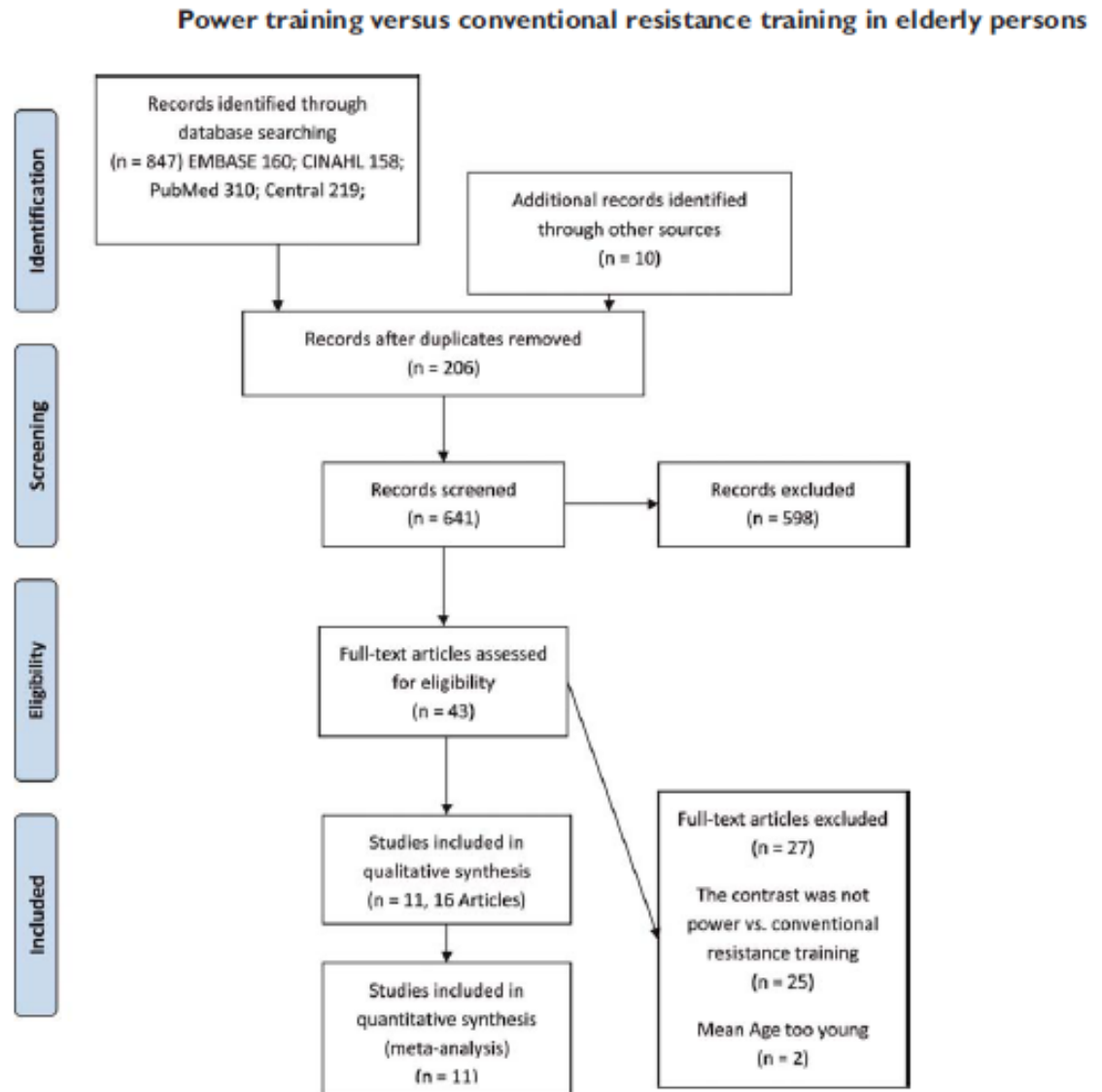
# Evidence Hierarchy



# Hierarchical Algorithm (PRISMA)

Preferred Reporting Items for Systematic Reviews and Meta-Analyses

This algorithm outlines the process by which the final articles will be / have been identified



# Results

- Summary of studies meeting the inclusion criteria.
- Table summarising finding of key studies (*each of these should directly be considered in the discussion*).
- Descriptive overview of the studies fulfilling inclusion criteria.
- Thematic review – Identify and combine the studies that support or refute specific idea, concepts and applications – Critique the quality of these studies.

These are the points you are going to consider in the discussion.

# Summary of Articles

Table 2. Characteristics of Included Trials

| Study                     | Number Included in Review* | Mean Age (y)** | Health and/or Functional Status       | Exercise Intensity | Exercise Duration (wk) | Number of Exercises                | Exercise Setting |
|---------------------------|----------------------------|----------------|---------------------------------------|--------------------|------------------------|------------------------------------|------------------|
| Ades 1997 (67)            | 24                         | 70             | Healthy                               | High               | 12                     | 4 UL, 3 LL                         | Gym              |
| Baker 2001 (19)           | 46                         | 68             | Osteoarthritis                        | Moderate-high      | 16                     | 5 LL (plus 2 functional exercises) | Home based       |
| Balogopal 2001 (200)      | 20                         | 71             | Healthy                               | High               | 12                     | 4 UL, 3 LL                         | Gym              |
| Bernon 1999 (201)         | 32                         | 70             | Healthy                               | High               | 8                      | 1 UL, 2 LL                         | Gym              |
| Brandon 2000 (72)         | 85                         | 72             | Healthy                               | High               | 16                     | 3 LL                               | Gym              |
| Buchner 1997 (62)         | 55                         | 74             | Functional limitation                 | High               | 24-26                  | 2 UL, 9 LL, 1 Tr                   | Gym              |
| Castaneda 2001 (31)       | 26                         | 65             | Chronic renal insufficiency           | High               | 12                     | 2 UL, 3 LL                         | Gym              |
| Chandler 1998 (37)        | 100                        | 78             | Functional limitation                 | Low-moderate       | 10                     | 8 LL                               | Home             |
| Charette 1991 (4)         | 27                         | 69             | Healthy                               | High               | 12                     | 7 LL                               | Gym              |
| Collier 1997 (202)        | 39                         | 65-85 (range)  | Healthy                               | High               | 10                     | 5 UL, 2 LL                         | Gym              |
| Damash 1999 (50)          | 71                         | 68             | Healthy                               | Low-moderate       | 8                      | 4 UL, 3 LL                         | Gym              |
| Donald 2000 (34)          | 58                         | 81             | Hospitalized                          | High               | NR                     | 2 LL                               | Hospital         |
| Ettinger 1997 (20)        | 295                        | 68             | Osteoarthritis, functional limitation | Moderate-high      | 78                     | 4 UL, 5 LL, 1 Tr                   | Gym + home       |
| Fatarone 1994 (36)        | 51                         | 87             | Frail                                 | High               | 10                     | 2 LL                               | Gym              |
| Fatarone 1997 (38)        | 34                         | 82             | Frail                                 | High               | 16                     | 11 (UL, LL)                        | Home             |
| Flynn 1999 (51)           | 29                         | 73             | Healthy                               | High               | 10                     | 8 LL                               | Gym              |
| Hagerman 2000 (48)        | 22                         | 64             | Healthy                               | High               | 16                     | 3 LL                               | Gym              |
| Haykowsky 2000 (203)      | 22                         | 68             | Healthy                               | High               | 16                     | 5 UL, 3 LL                         | Gym              |
| Hennessey 2001 (204)      | 16                         | 71             | Frail                                 | Moderate-high      | 25                     | 11 (UL, LL)                        | Gym              |
| Hiatt 1994 (23)           | 19                         | 67             | Peripheral arterial disease           | High               | 12                     | 6 LL                               | Gym              |
| Hortebagyi 2001 (205)     | 30                         | 72             | Healthy                               | High + low         | 10                     | 1 LL                               | Gym              |
| Jette 1996 (58)           | 102                        | 71             | Healthy                               | Low-moderate       | 12-15                  | 10 (UL, LL, Tr)                    | Home             |
| Jette 1999 (39)           | 215                        | 75             | Functional limitation                 | Low-moderate       | 26                     | 11 (UL, LL, Tr)                    | Home             |
| Jones 1994 (53)           | 46                         | 67             | Healthy                               | Moderate           | 16                     | 7 LL                               | Gym + home       |
| Jubrias 2001 (206)        | 26                         | 69             | Healthy                               | High               | 24                     | 1 LL, 2 UL                         | Gym              |
| Judge 1994 (63)           | 55                         | 80             | Healthy                               | Moderate-high      | 12                     | 6 LL                               | Gym              |
| Kerr 2001 (207)           | 84                         | 60             | Healthy                               | High               | 104                    | 4 UL, 4 LL                         | Gym              |
| Latham 2001 (45)          | 20                         | 81             | Hospitalized                          | High               | 2                      | 1 LL                               | Hospital         |
| Latham 2003 (35)          | 243                        | 79             | Frail                                 | Moderate-high      | 10                     | 1 LL                               | Home             |
| Maiorana 1997 (32)        | 31                         | 60             | 3 Months post-CABG                    | Moderate-high      | 10                     | 7 UL, 4 LL, 1 Tr                   | Gym              |
| Maurer 1999 (21)          | 113                        | 66             | Osteoarthritis                        | High               | 8                      | 1 LL                               | Gym              |
| McCartney 1995 (64)       | 142                        | 64             | Healthy                               | High               | 42                     | 3 UL, 3 LL, 1 Tr                   | Gym              |
| McGuigan 2001 (24)        | 20                         | 68             | Peripheral arterial disease           | High               | 24                     | UL, LL, Tr                         | Gym              |
| McMunio 1995 (40)         | 86                         | 82             | Functional limitation                 | Low-moderate       | 26                     | 24 (UL, LL, Tr)                    | Home             |
| Mihalko 1996 (44)         | 58                         | 83             | Healthy                               | High               | 8                      | 5 UL                               | Gym              |
| Moreland 2001 (25)        | 133                        | 69             | Stroke                                | NR                 | NR                     | NR                                 | Hospital         |
| Nelson 1994 (52)          | 40                         | 61             | Healthy                               | High               | 52                     | 2 LL, 2 Tr                         | Gym              |
| Newnham 1995 (41)         | 30                         | 82             | Functional limitation                 | High               | 12                     | UL, LL, Tr                         | Gym              |
| Nichols 1993 (54)         | 36                         | 67             | Healthy                               | High               | 24                     | 4 UL, 2 LL, 1 Tr                   | Gym              |
| Parkhouse 2000 (30)       | 22                         | 68             | Low bone mineral density              | High               | 32                     | 9 LL                               | Gym              |
| Perrig-Chiello 1998 (208) | 46                         | 73             | Healthy                               | NR                 | 8                      | NR                                 | Gym              |
| Pollock 1991 (65)         | 36                         | 72             | Healthy                               | High               | 26                     | 5 UL, 2 LL, 3 Tr                   | Gym              |
| Pu 2001 (26)              | 16                         | 77             | Heart failure                         | High               | 10                     | 2 UL, 2 LL                         | Gym              |
| Rall 1996 (209)           | 14                         | 70             | Healthy                               | High               | 12                     | 1 UL, 2 LL, 2 Tr                   | Gym              |
| Rhodes 2000 (55)          | 44                         | 69             | Healthy                               | High               | 52                     | 3 UL, 3 LL                         | Gym              |
| Santorio 2001 (210)       | 30                         | 73             | Healthy                               | High               | 16                     | 4 UL, 2 LL                         | Gym              |
| Schilke 1996 (22)         | 20                         | 65             | Osteoarthritis                        | High               | 8                      | 1 LL                               | Gym              |
| Schlicht 1999 (71)        | 24                         | 72             | Healthy                               | High               | 8                      | 6 LL                               | Gym              |
| Simpson 1992 (28)         | 34                         | 73             | Chronic airflow limitation            | High               | 8                      | 1 UL, 2 LL                         | Gym              |
| Singh 1997 (29)           | 32                         | 71             | Depressed                             | High               | 10                     | 2 UL, 3 LL                         | Gym              |
| Siplis 1996 (56)          | 27                         | 77             | Healthy                               | High               | 18                     | 4 LL                               | Gym              |
| Skelton 1995 (42)         | 47                         | 80             | Healthy                               | Low-moderate       | 12                     | 3 UL, 6 LL                         | Gym + home       |
| Skelton 1996 (59)         | 20                         | 81             | Functional limitation                 | Low-moderate       | 8                      | 2 UL, 6 LL                         | Gym + home       |
| Taaffe 1996 (57)          | 36                         | 68             | Healthy                               | High + low         | 52                     | 3 LL                               | Gym              |
| Taaffe 1999 (211)         | 46                         | 71             | Healthy                               | High               | 24                     | 4 UL, 3 LL                         | Gym              |
| Topp 1993 (60)            | 63                         | 70             | Healthy                               | Low-moderate       | 12                     | 6 UL, 6 LL                         | Gym + home       |

Include:

- Author & Date
- Area of focus
- Demographic characteristics
- Methodology
- Measures
- Outcomes / finding

If there is lots of information split the table into:

1. Articles selected
2. Article findings

# Discussion

## CRITICALLY DISCUSS THE RESULTS

1. Summary of research study findings and conclusions.
2. Explain the findings in the context of your review focus.
3. Explain, discuss and interpret the themes identified in the results – use theory and wider support from references to support these if required.
4. Discuss strengths and limitations of the evidence (studies) found.
5. Clarity of overall evidence in addressing your research question - Support or rejection of a specific point of view.
6. Position statement.
7. Outline how the information may be used in practice or to clarify theory.
8. Limitations to your study
9. Areas for future research and need for further clarifications.

# Conclusions

A clear and concise statement that answers your research question / aims.

- Main findings and implications
- Main questions for further research / evaluations

# Acknowledgements

Key contributors, other than you, to the research.

Anyone you would like to thank i.e. reader, helpers collecting research etc.

# Conflicts of interest

- No conflict of interest was declared.

*This review was conducted as part of an degree programme with no intention to publish. There are no conflicts of interest associated with this review article.*

# References

- Cite them Right
- As outlined in the SHOE guidelines

# Format of the Article

- **Header:** - justified
  1. Publication- SHOE Reviews
  2. Title
  3. Author
- **Footer:** justified
  1. School of Sport Health & Outdoor education
  2. Literature Review in Sport & PA, 2015-16
- Font: pt 12 Ariel 1.5 line spacing
- Page numbering – Top right
- Main sub-headings bold Ariel 14
- Secondary sub-heading bold Ariel 12