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Physical Training in the Military: A Telling History

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Introduction

The need to physically train soldiers for combat can be traced back to the tome Epitoma rei militaris, by Flavius Renatus (circa 500 AD).¹

Noting the period over which physical training (PT) has been a focus of military training, the question arises as to how much has changed.

Purpose

The aim of this study was to investigate PT as it has been applied to the Australian military through history.

Methods

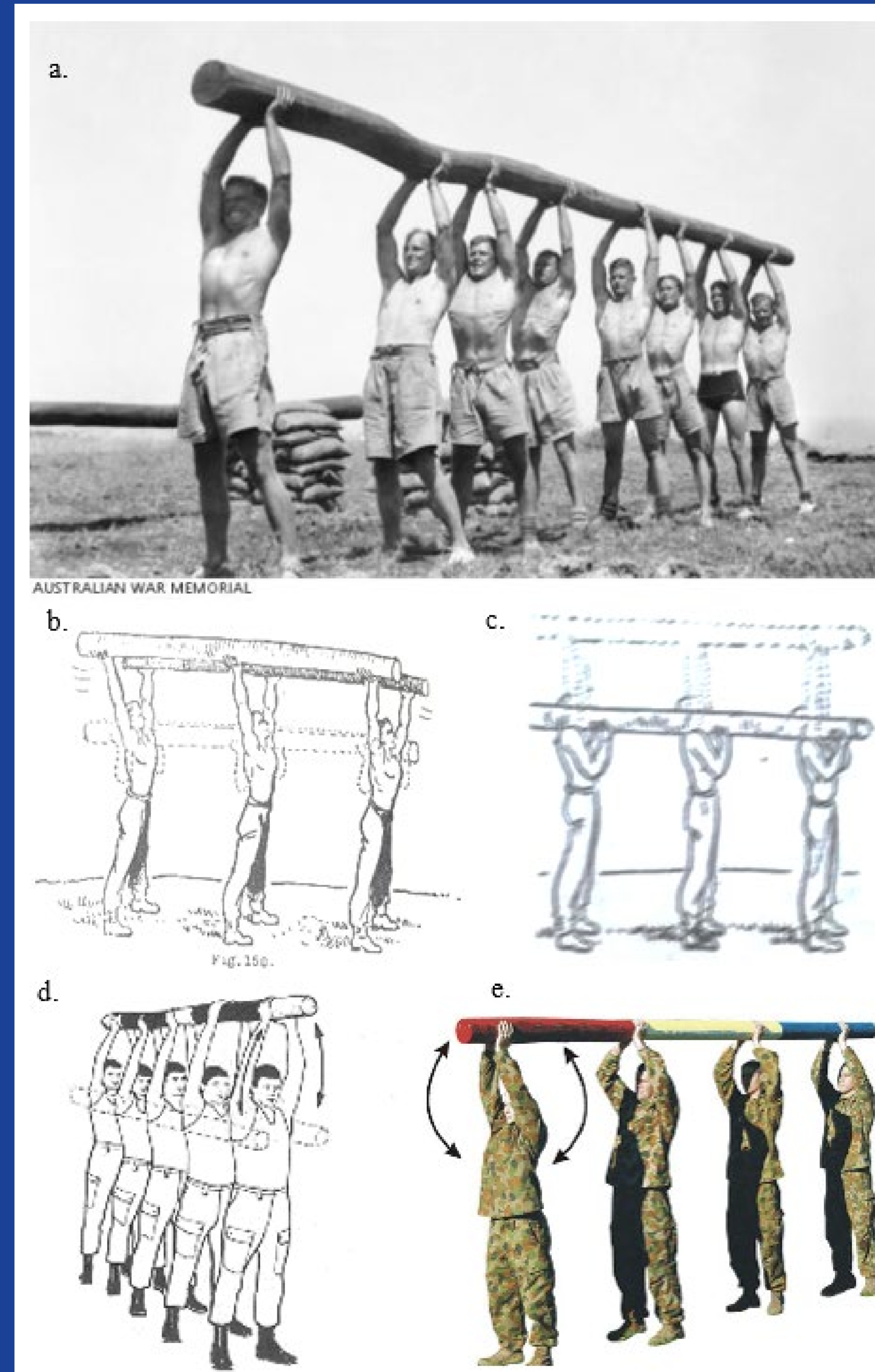
Data were sourced from:

- participating training establishments,
- Australian Defence Force Physical Training Instructors (subject matter experts),
- previously published reports, and
- The Australian War Memorial Research Centre

Results & Discussion

- Many 'types of training' undertaken for military PT and still employed today can be found in manuals dating back to 1937. For example, the conduct of specific log exercises is shown in archival photographs spanning 67 years (Figure 1) while specific rope obstacle training was found in documents spanning 97 years.
- Doctrine from 1937² highlights the importance of progressive training, the need for training to be consistent, to consist of six sessions per week of at least 60 minutes and instructs command staff not to replace PT with other activities. Furthermore, the doctrine states that physical fitness is the only framework upon which soldier qualities can be built.
- Information provided by Physical Training Instructors spanning nearly thirty years indicated there has been a reduction in distance runs and marches and an increase in strength-orientated training, with a shift to a fitness industry model in the early 90s and a sports model in recent years.
- Considering this, review of a major training unit found a 33% decrease in the number of PT sessions from 63 (1987) to 40 (2018) in the 80-day training program with many sessions lasting only 40 minutes (Table 1).^{3,4,5}

Figure 1: Photographs of log exercises over a span of 67 years suggest this form of training has remained unchanged



Conclusion

- Over a span of around 100 years many training formats and exercises appear to have remained extant (e.g. obstacle courses, team-based training approaches, movement / functional focussed exercises, etc) although some changes to the non-combat orientated fitness methods (e.g. running and strength training) have occurring in more recent decades.
- There is evidence that best-practice for physical conditioning of military personnel has been known and documented since the 1930s.

Operational Relevance:

Given that physical training has largely remained unchanged in nearly a century, and that best practice for military physical training was documented over 80 years ago, **the main limitations to best practice for military physical training may be administration and logistic practices** (ultimately leading to over training) as opposed to scientific knowledge of how best to train personnel.

References:

1. Renatus, F. V. (1996). Vegetius: Epitome of Military Science (N. P. Milner, Trans. 2nd ed.). Liverpool: Liverpool University Press.
2. Commonwealth. (1937). Physical Training. Accessed: Australian War Memorial: His Majesty's Stationary Office.
3. Pope RP, Herbert RD, Kirwan JD & Graham BJ (2000). A randomized trial of pre-exercise stretching for injury prevention. *Medicine and Science in Sport and Exercise*, 32(2): 271-277
4. Orr, R, & Moorby, G (2006). The Physical Conditioning Optimisation Project - a Physical Conditioning Continuum Review of the Army Recruit Training Course. Department of Defence, Canberra
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PT Session	1987	1993	1994 ³	1998	2001	2006 ⁴	2007 ⁵	2010	2018
Assessment	11	11	0	8	8	4.67	5.33	3	7
Route Marching	15	15	10	3.5	5	8.67	11.33	9	6
Running	9	6	10.5	2	0.5	2	2.67	6	1
Strength - Based	0	0	0	3	0	0	0	0	12
Obstacle Courses/RDJ	15	18.5	12.5	15.5	16	9	8	6	8
Circuit	5	4.5	7.5	5	7	6	4	7	0
Swim / Swim Circuit	4	4.5	4	3.5	4	6	4.67	7	3
Battle PT		3.5	5.5	0	0	8.67	6	0	0
Team Games	2	1	0	1.5	0.5	0.67	0	0	0
Recovery	0	0	0	0	1	0	0	0	2
Lectures	2	2	0	4	4	1.3	1	3	1
TOTAL	63	66	50	46	46	47	43	41	40

Table 1: Number of PT sessions of specific types noted in published research reports and the current Project to have comprised the PT programs within Army Recruit Training.



Army Cadets at Training in a Gymnasium, First World War, 1914-1918 HO2420

Officer Cadets at ADFA, 2016 Photographer John Carroll Source: Defence Media Online

