ANIMAL WELFARE PROGRAM FOR MILITARY WORKING DOGS IN BRAZIL:

WORK ROUTINE, EMOTIONAL STATE PROFILE, CLINICAL BEHAVIOURAL AND PERFORMANCE ANALYSIS
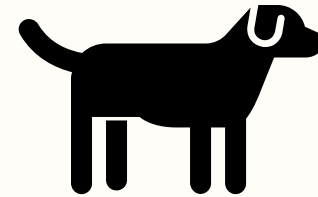
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Army Central Hospital, Brazilian Army
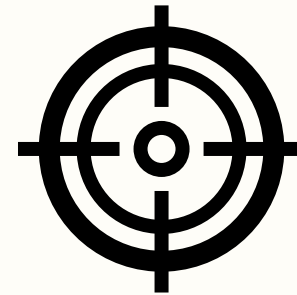
Research Coordinator

Introduction

▷ Military Working Dogs (MWD)
  ▷ Valuable tool for decades
  ▷ Specific welfare need yet to be investigated

Objectives

▷O1. Select an Army Unit to run the Program

▷O2. Plan and execute an Animal Welfare Program for MWD

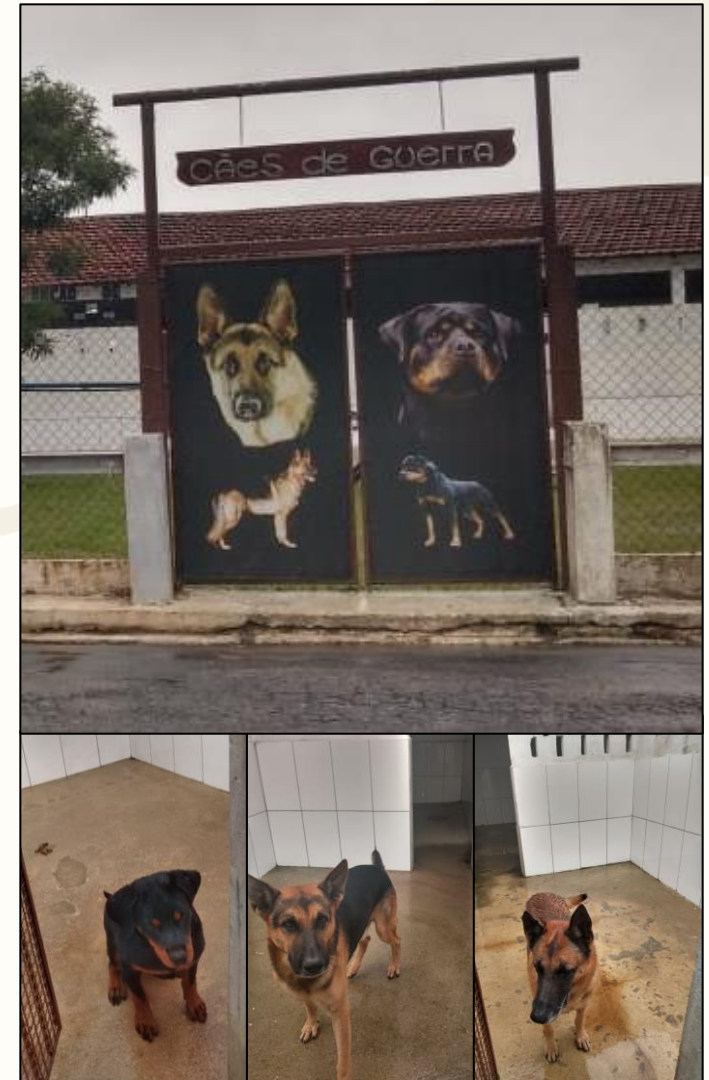▷O3. Mensurate AWP influence on dog welfare and performance

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Methods

▷Unit selection

  ▷Informal, based on professional adherence and possibilities

  ▷Command and veterinarian

▷Gericinó Camp Kennel

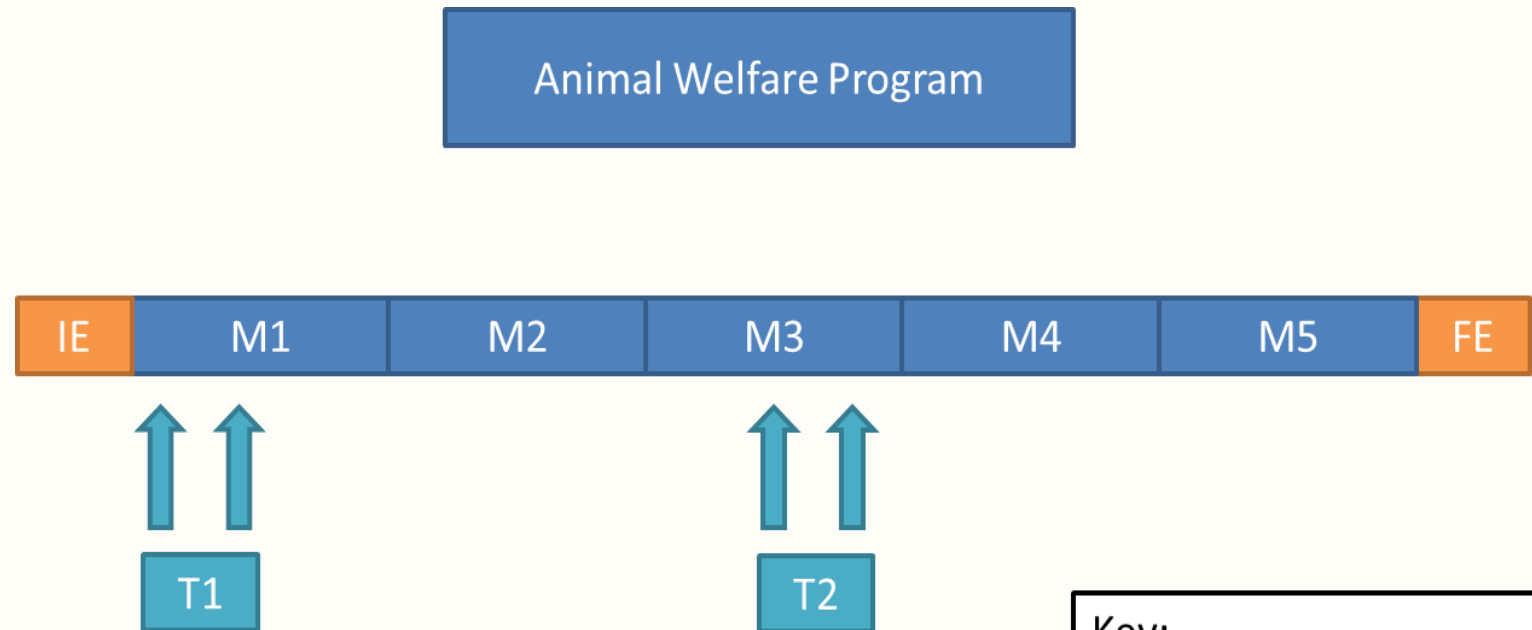 ▷14 animals, m-f, 2-12 y.o

  ▷Rottweiler, German Shepherd and Belgian Malinois (BM)

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Experimental design

▷Customized AW program:
  ▷5 monts
  ▷Inicial and final evaluation
  ▷2 training modules
    ▷ 30h total
  ▷Work/handling recommendations
  ▷Based on previous pub

Animal Welfare Program

| IE | M1 | M2 | M3 | M4 | M5 | FE |

T1   T2

Key:
IE – Initial evaluation
AF – Final evaluation
M – Months
T – Training module

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Evaluation

Component	Instrument	Subjects	Reference
Clinical behavioural	Medical clinical evaluation	MWD	Overall (2015)
Work routine	Register		Silva and Santana (2018)
Emotional State Profile	Films and evaluation		
Performance test	Standardized test		Brazilian (2019)

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Handler Training

1st module

▷ Applied behavior

▷ Learning theories

▷ Working dog welfare

2nd module

▷ Protection work

▷ Detection work
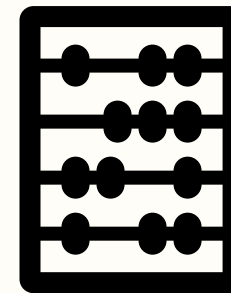
▷ Training planning

Work/handling recomendations

▷Animal welfare oriented:

   ▷Enviromental enrichment

   ▷Non-confrontational training methods

   ▷Adequate demands

▷Performance orientated:

   ▷Adequate training volume

   ▷Adequate demands

Statistics

▷Shapiro-Wilk normality test

▷Student´s "t" test for simple comparison

▷RM-ANOVA and Bonferoni´s "t" test

  ▷Emotional state profile
  ▷Performance test

▷$p < 0.05$

Results – Clinical Behavioural Evaluation

▷ IE

   ▷ High arousal

   ▷ Few distress signals

      ▷ Circling in the presence of stranges

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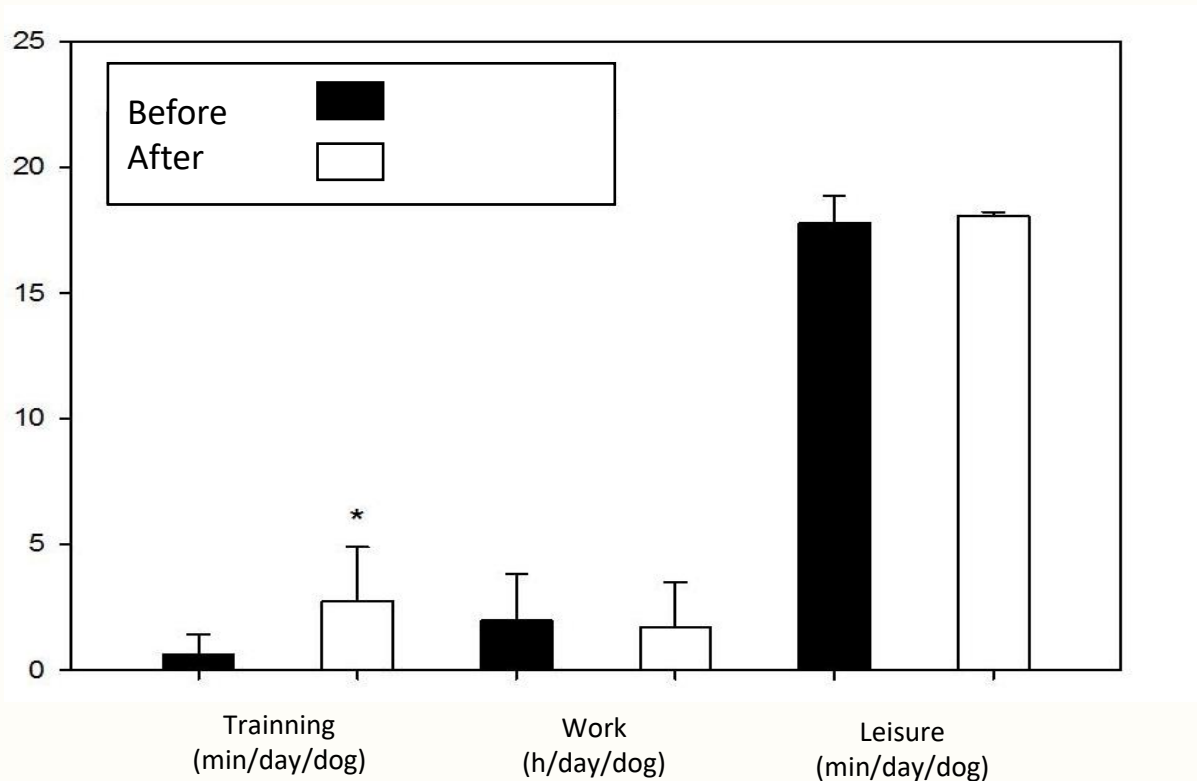
Results – Clinical Behavioural Evaluation
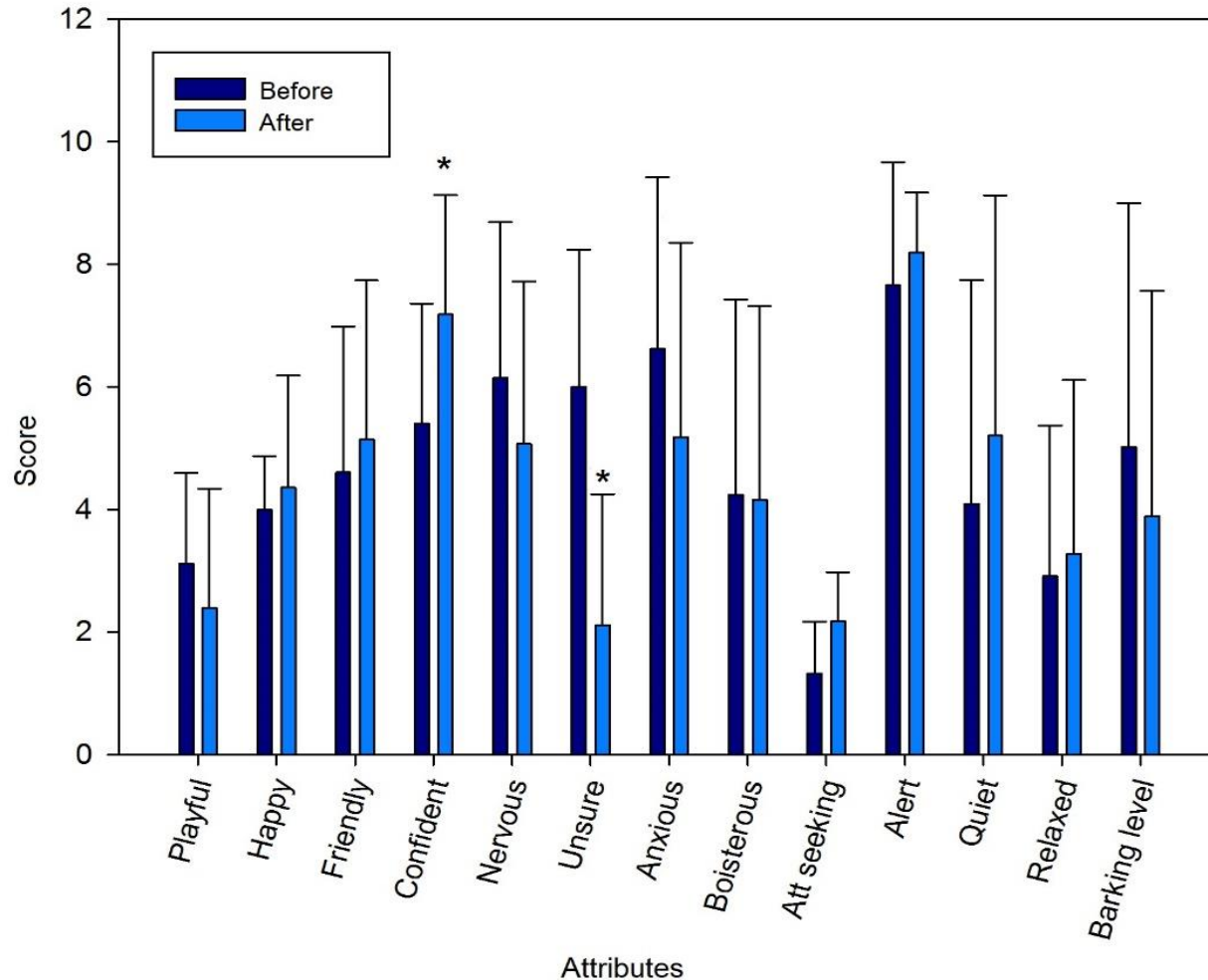

▷ After implementing training
  ▷ One BM female
    ▷ Sings of anxiety
    ▷ Acral dermatitis
    ▷ Probably due to high training demands
    ▷ Handling orientation
    ▷ Problem solved

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Work routine

▷ We could improve training duration

> ▷ 3 min (average) still very low
>
> > ▷ 12 min (minimum)

▷ Too many hours of work

Emotional State Profile

▷ Enormous variance
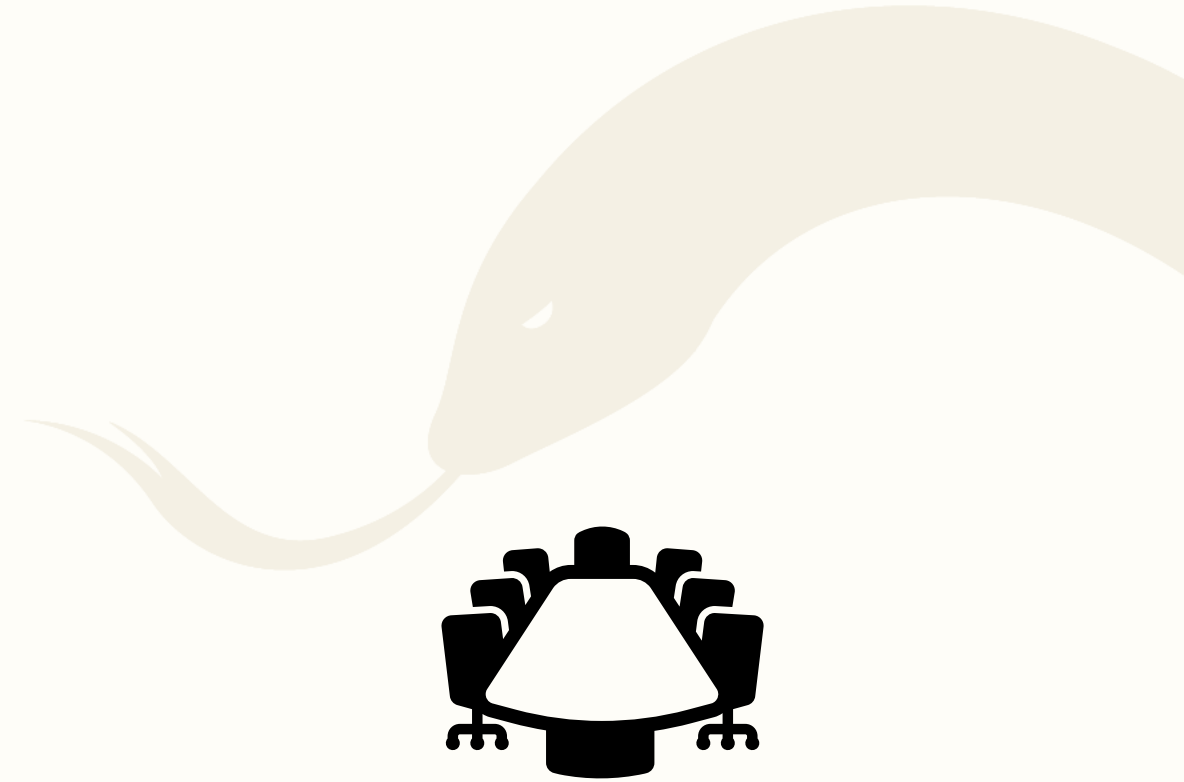
▷ Positive influence on 2 attributes

Performance test

Section	Exercise	Before	After
Obedience	1. Guided handling	25.0	26.4
	2. "Sit"	20.0	20.0
	3. "Down/Here"	30.0	30.0
	4. "Rest"	25.0	22.2
Protection	1. Assault (Run and bite)	35.7	40.7*
	2. "Out"	20.7	25.0*
	Total	159.0	161.0

▷ Positive influence on some performance indicators (protection)

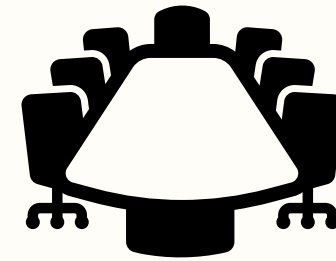▷ Not on others (obedience)

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Discussion

▷ High training demands
  ▷ Can cause welfare problens
  ▷ Clinical behavior intervention needed

▷ Routine in a military unit
  ▷ Complex
  ▷ Depends on several factors
  ▷ Can be optimized → more training

Discussion

▷ Emotional State Profile

  ▷ Can be influenced by an AWP

  ▷ Mothodology discussion

    ▷ Virtually?

    ▷ More professionals?
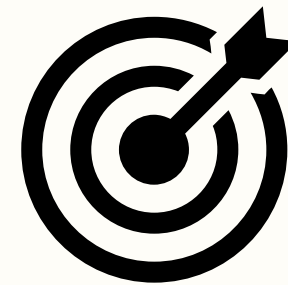
▷ Performance tests
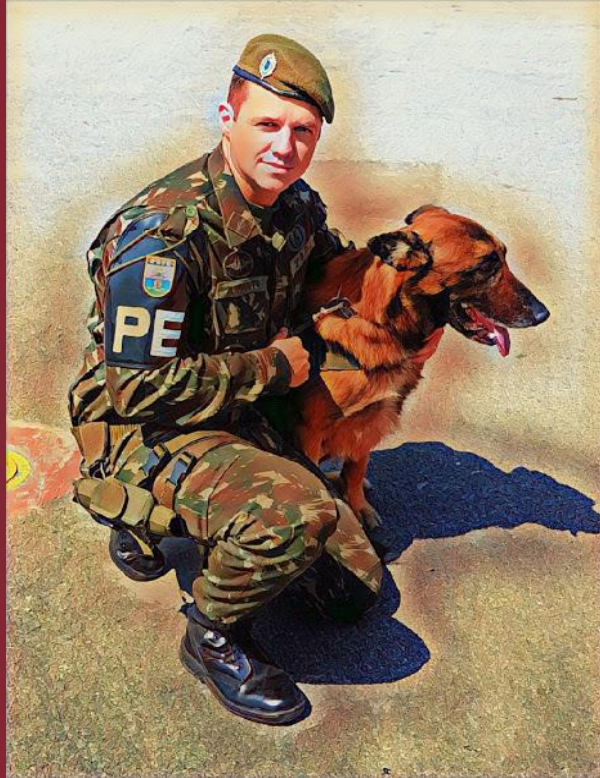
  ▷ Protection was influenced by teh AWP while obedience not

    ▷ Well stablished dog/handler bond?

    ▷ Protection is a more difficult task to the dogs?

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Conclusion

▷O1: Army Unit selected
  ▷Importance of qualified adherent professionals

▷O2. Animal Welfare Program for MWD
  ▷Importance of command support and customization

▷O3. AWP influence on dog welfare and performance
  ▷Able to positively influence some behavioural and performance measurements
  ▷AW Manual publication
  ▷Expand to other units

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Thanks!

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