



OVERALL CLASSIFICATION:
Approved for Public Release



Holistic Health and Fitness (H2F) Overview

COL Kevin Bigelman
H2F Director

70% of people between 17-24 are unqualified for military service.

17% of AC Soldiers and **25%** of Reserve/ National Guard Soldiers are obese.

55% of Active Component Soldiers sustain a musculoskeletal injury each year.

10 million limited duty days & **\$577** million in patient care.

53% or ~8 BCTs of Active Component non-deployable Soldiers are non-deployable due to medical reasons.

12% of Soldiers have sleep disorders & **5%** of AC Soldiers require prescription sleep aids.

Implement H2F to:

- *Optimize Soldier personal readiness*
- *Optimize physical and non-physical performance*
- *Reduce injury rates, particularly over-use MSKI rates*
- *Rapidly rehabilitate and recondition Soldiers following injury*
- *Improve overall Soldier and unit morale and effectiveness*



"I want to ensure every Soldier can play home and away games."

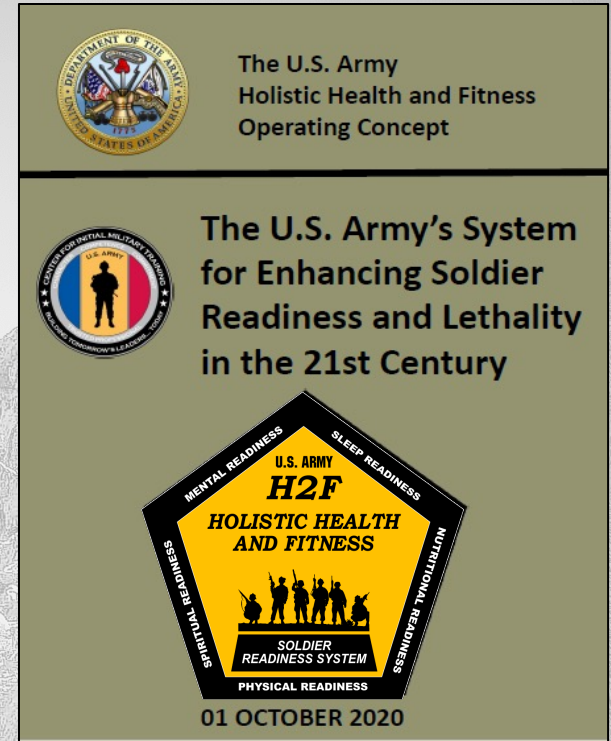
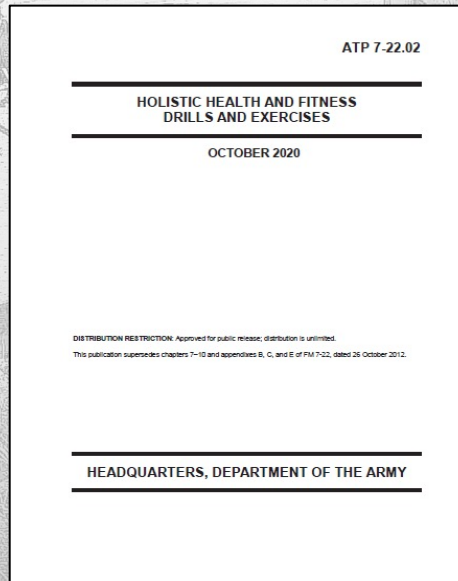
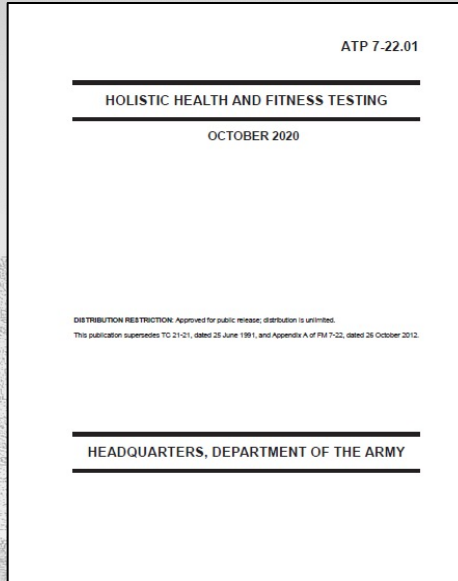
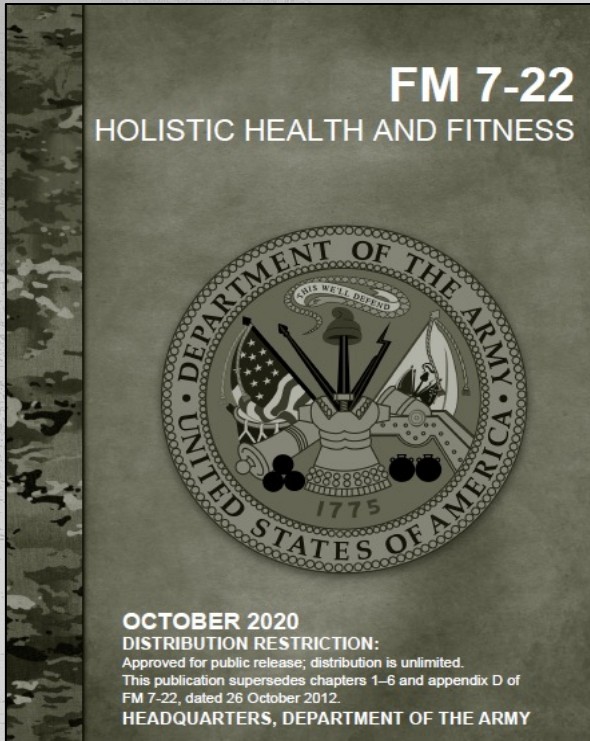
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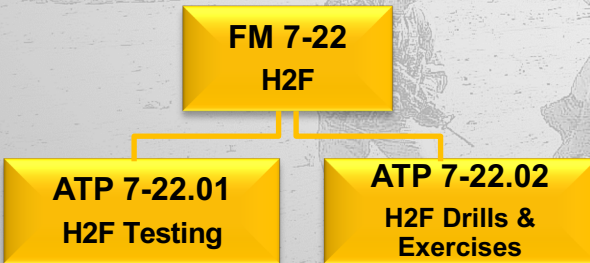


Use of interdisciplinary performance teams is a proven approach to attaining performance optimization and optimal care for athletes.





U.S. Army H2F Operating Concept





Changing the Army's Culture of Health and Fitness!

H2F DOMAINS

Physical

Non-Physical

PHYSICAL READINESS

- Muscular Strength
- Muscular Endurance
- Aerobic Endurance
- Anaerobic Endurance
- Power



MENTAL READINESS

- Cognitive Capability
- Emotional Capability
- Interpersonal/Social Capability



SPIRITUAL READINESS

- Beliefs
- Principles
- Values



NUTRITIONAL READINESS

- Proactive
- Active
- Reactive



SLEEP READINESS

- Duration
- Timing
- Continuity



Soldier Performance Readiness Center



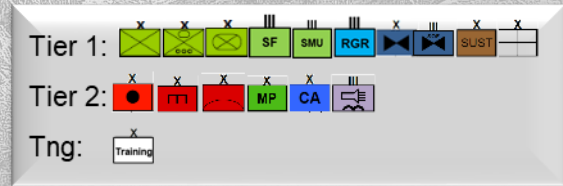
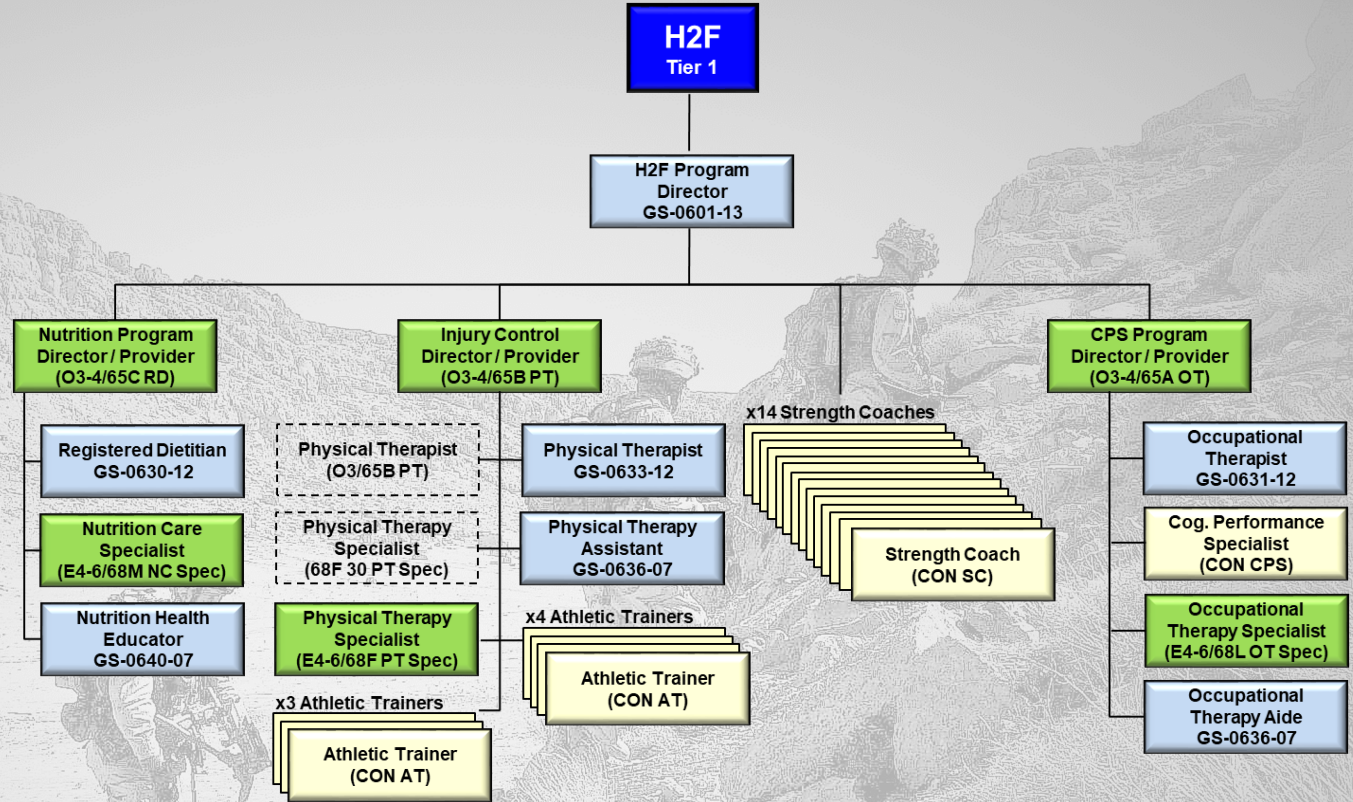
Treatment and Training Equipment

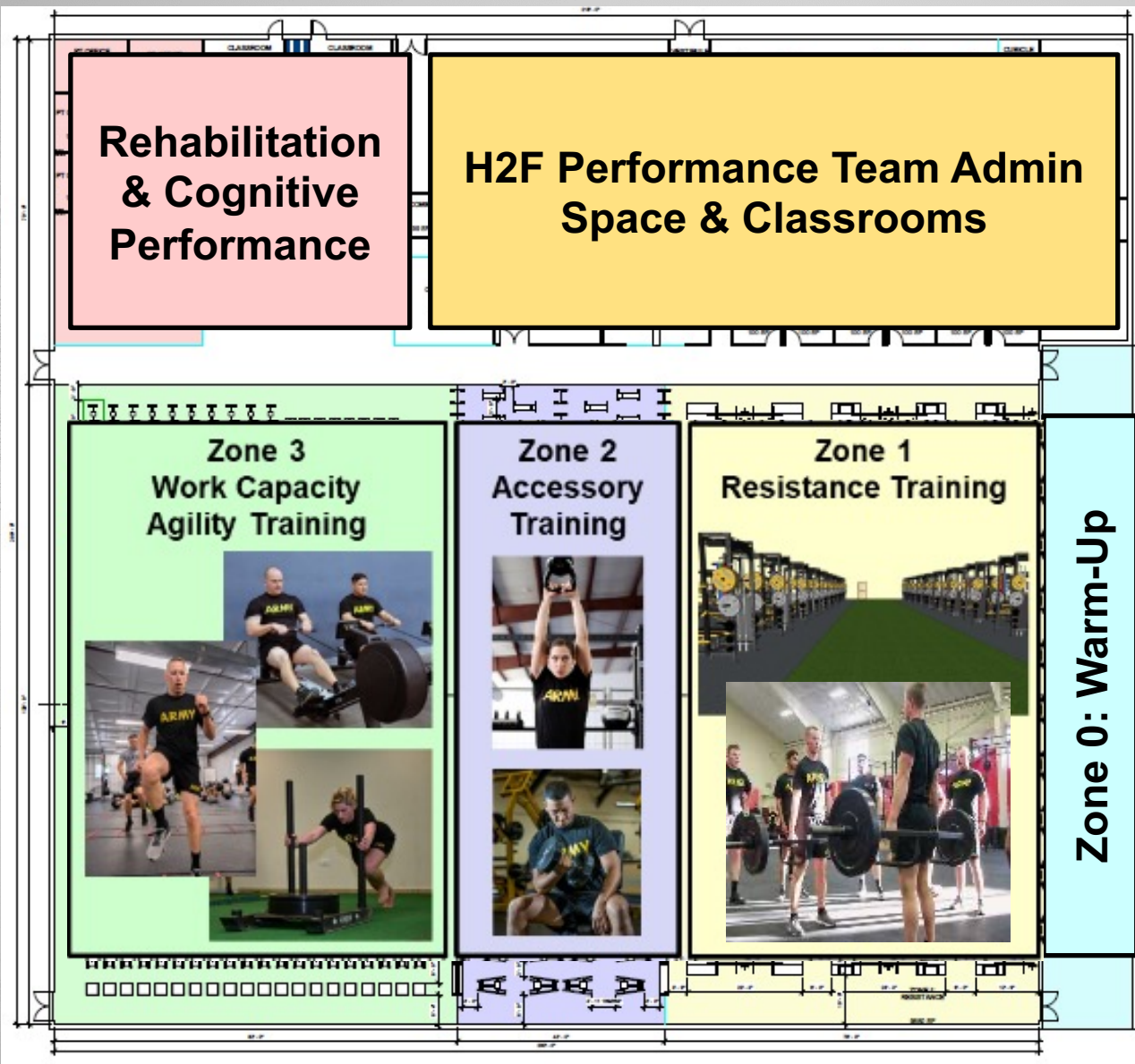


Deployable Medical Equipment Sets



Deployable Training Lockers





Facility Design Standards

Facility Size

- BDE (42,700 SF)
- x3 Distinct Physical Training Zones**
 - Resistance Training
 - Accessory Training
 - Work Capacity / Agility Training
- x2 Classrooms (25 PAX each)**
- x1 Rehab & Cognitive Performance Area**

- Zone 0** - Prep / Warm-up Area
- Zone 1** - Resistance Training
- Zone 2** - Accessory Training
- Zone 3** - Work Capacity / Agility Training
- Rehabilitation & Cognitive Performance Area**
- Admin / Class / Team room**





AMERICA'S ARMY:

Globally Responsive Regionally Engaged

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Army Combat Fitness Test

**Dr. Whitfield East
Research Physiologist**

CUI

Baseline Soldier Physical Readiness Requirements Study (HQDA 041-13)

Identify HPDT tasks:

1. Movement to Contact
2. Build Fighting Position
3. Move O/U/A/T in Urban Terrain
4. React to man-on-man contact
5. Extract & evacuate a Casualty

Predictive Tests:
must successfully predict task simulation performance

Muscular Strength

Muscular Endurance

Explosive Power

Speed / Agility

Aerobic Endurance

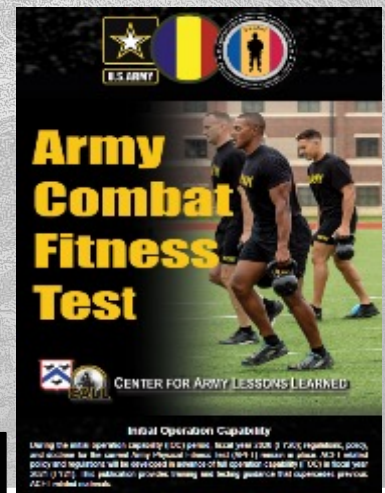
Warrior Task Analysis

Combat Task Simulation

Simulation must mimic the warrior task

Similar physiological demands

Physiological demands



80% predictive of Warrior Tasks and Battle Drills performance

Muscular Strength

Lift, carry, drag heavy loads



Muscular Endurance

Work for long periods of time



Explosive Power

Generate and apply force



Speed - Agility

Move quickly over, under, around, through obstacles



Aerobic Endurance

Move for long distances over uneven terrain under load



1- Movement to contact

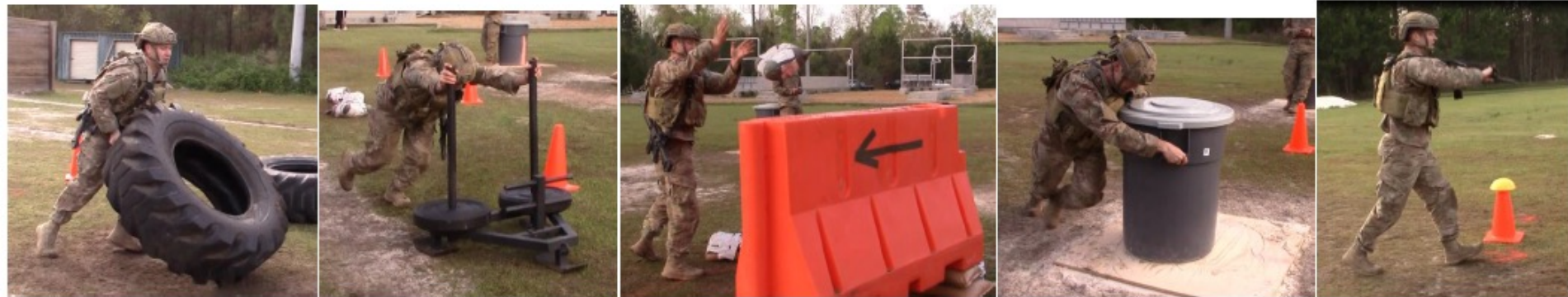
2- Build a hasty fighting position



3- Move over-under-around-through obstacles on uneven terrain



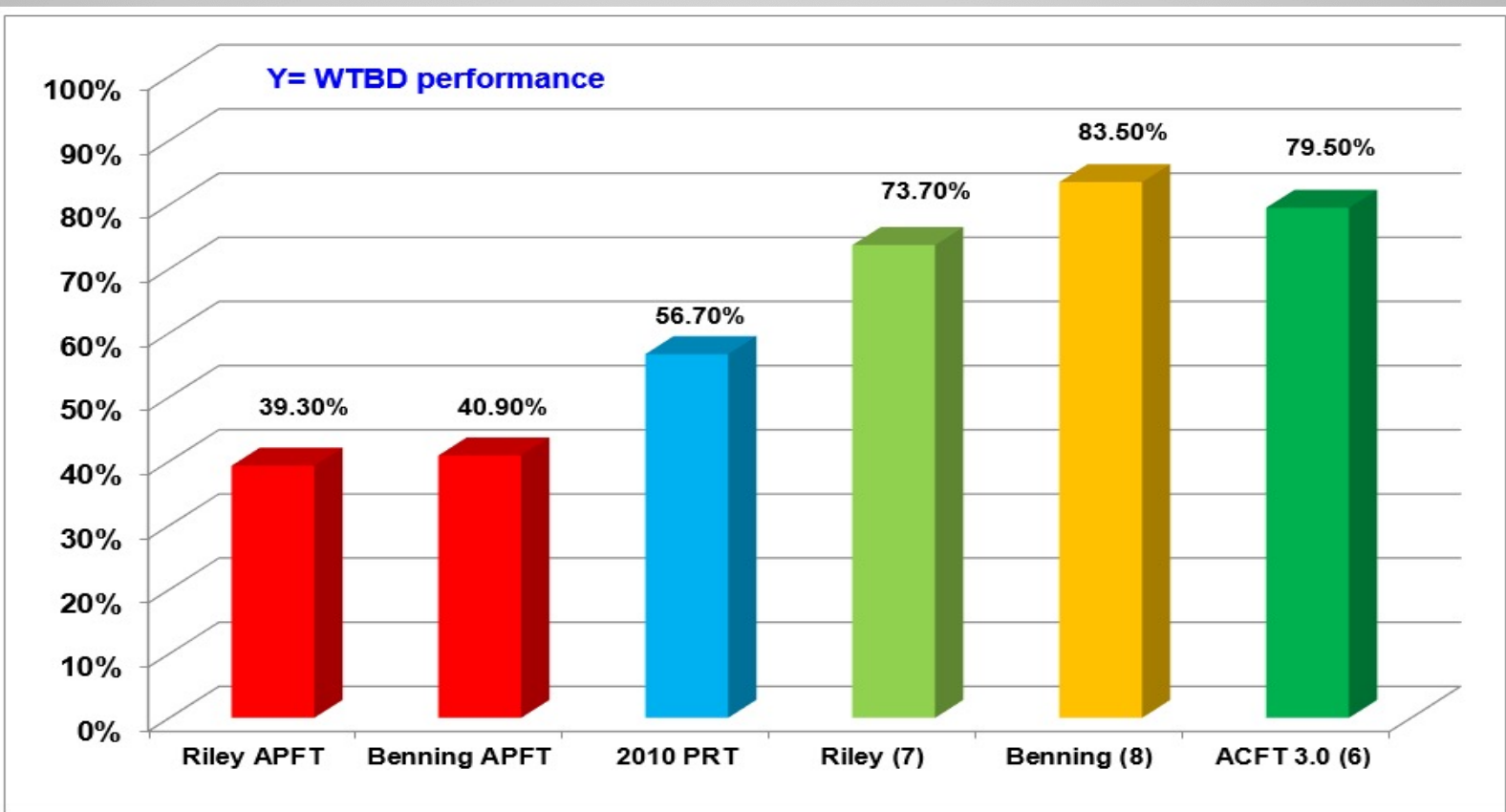
4. Employ progressive levels of strength / power (man-man contact)



5. Extract – Evacuate a casualty



What test events are better predictors of WTBD-ST performance



Push-up
2-mile Run
Sit-up

Push-up
2-mile Run
Rower
300m Shuttle
Standing LJ
Pull-up

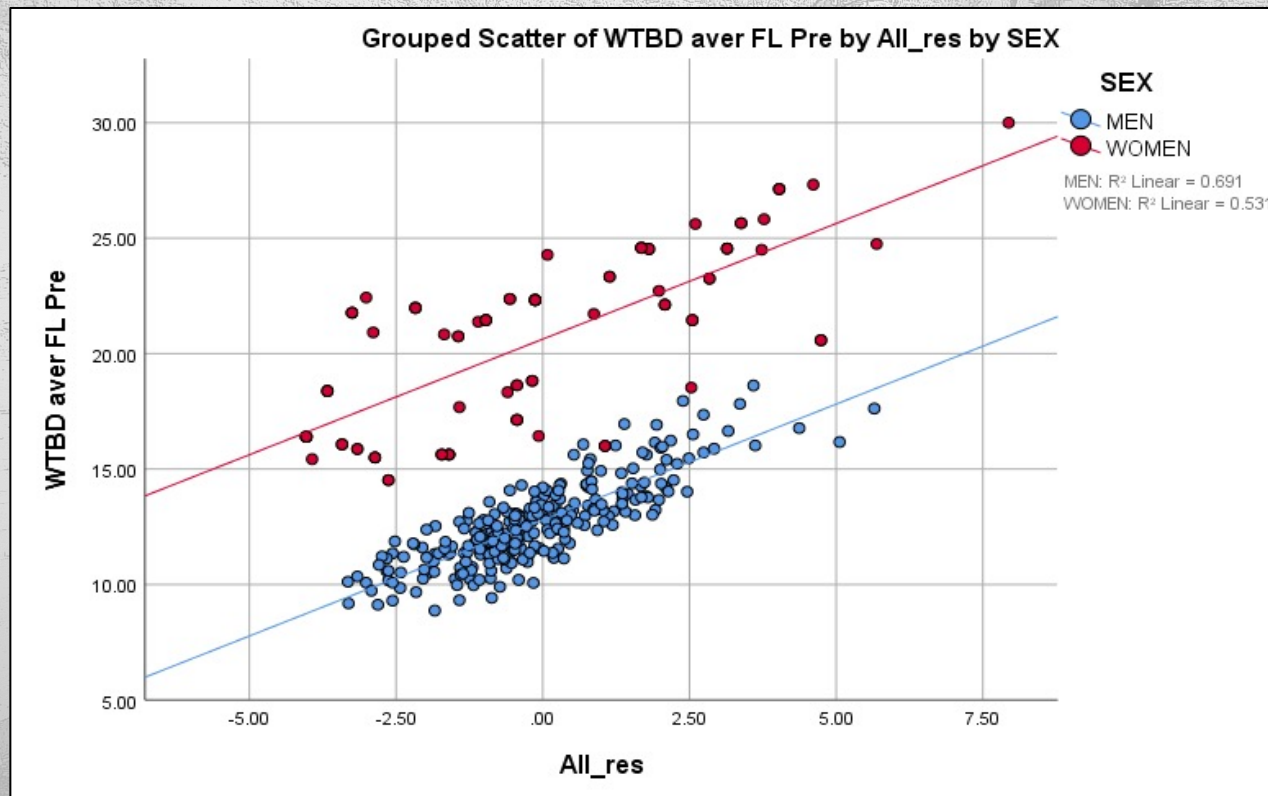
Sled Drag
2-mile Run
Deadlift
Sled Push
Push-up
KB Squat
Power Throw

Sled Drag
2-mile Run
Deadlift
Push-up
Leg Tuck
Power Throw
300m Shuttle
Sled Push

S-D-C
2-mile Run
3RM Deadlift
HR Push-up
Leg Tuck
Power Throw

The regression lines below represent residuals (Y-Y') across the six (6) ACFT test events by Event_sex by Sex for the FT Riley sample. $R^2 = 0.803$.

- The trend lines are parallel demonstrating the effects of physical fitness on Warrior Tasks and Battle Drill – Simulation Test performance.
- The gap between the men-women trend lines represents physiological differences and training gaps between men and women.
- As Soldiers continue to train, trend gaps will decrease as performance regresses towards the mean.





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QUESTIONS

