

Takeaway: Police departments must institute several psychosocial and work-related changes for the police force to operate more efficiently and safely.

Musculoskeletal Disorders of a Cop

Gianna Castano

Department of Human Factors and Behavioral Neurobiology

Results

- Snapping of anterior crucial ligament (ACL) → Bow-leggedness and osteoarthritis
- Herniated L1, L5, S1 vertebrae (Sacroiliac Joint) → Temporary paralysis and long-term back pain

WMSD Risk

- Bend at 45°, legs at 90°, heavy lift, no secure handle, 4 adjustments/min
- Final REBA Score = 11. Devastatingly high risk is associated with the postures portrayed

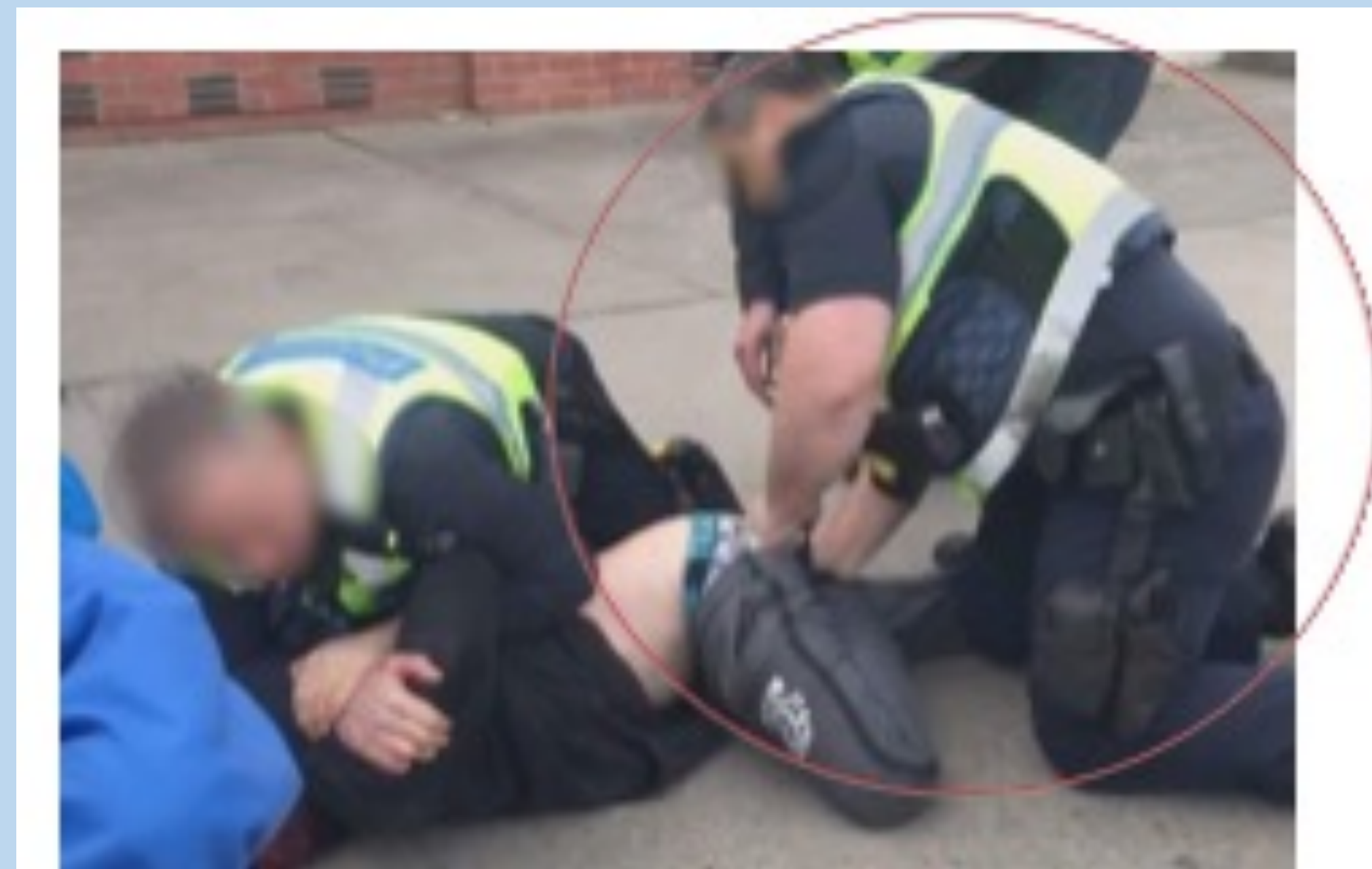


Image 1: Officers in awkward positions to restrain suspect.

Job Control Scale – Psychosocial Analysis

- Subjective view of influence and freedom in job
- Likert scale 1-5: 1=very little and 5=very much
- Subject score=1.75 → low satisfaction and control

Perceived Control → 1.75

Task Control → 2.14 (Questions 1, 3, 4, 5, 6, 15, and 16); Alpha = 0.85

Decision Control → 1.5 (Questions 8, 10, 11, and 13); Alpha = 0.74

Physical Environment Control → 1.0 (Questions 7 and 14); Alpha = 0.79

Resource Control → 1.0 (Questions 2 and 12); Alpha = 0.82

Image 2: Subjective scores from Job Control Scale.

Suggestions for Improvement

1. Mandatory days of
2. Nanofiber vest
3. Promoting based on merit – not just by a test

Introduction

Police officers are often overlooked as valued protectors of society. They experience difficulties from superiors, citizens, and even their uniforms, causing physical injury, discomfort, and mental repercussions.

This project sought to get an inside look of the police officer's job via a case study analyzing where injuries came from and physically and mentally detrimental experiences a police officer may face on and off shift, and years after retirement.

Method

- Participant: A retired NYPD officer (20+ years of service) recruited through personal relations
- Time of Participation: 2 months
- Tasks: Completing the Job Control Scale, a body discomfort survey, and participating in interviews.

Conclusion

Police officers are highly vulnerable to musculoskeletal disorders and experience negative psychosocial factors regularly. To improve the performance of policemen and women, they must receive adequate access to various resources and incentives.