HPR*net*
Human Performance Research
network

A Dynamic and Temporal Perspective to Optimise Team Resilience

❑ Teams are critical to Army's capability; they form the basic building block of every activity during training and operations

❑ The collective capacity of teams to withstand or recover from adverse events that threaten their functioning, viability or development has intuitive and practical appeal

❑ Rich and diverse literature on individual level resilience (e.g., Britt et al., 2016; Kossek & Perrigino, 2016; Pangallo et al., 2015)

❑ Research and theory on team resilience underdeveloped

  ▪ piecemeal theoretical development, conceptual ambiguity, and methodological weaknesses

❑ Individual, **team** and organisational resilience (Army R&D Plan, 2016)

  ▪ How can Army prepare teams to operate effectively in challenging operational conditions? How can Army build better team resilience?

Curtin University   MACQUARIE University SYDNEY·AUSTRALIA   THE UNIVERSITY OF WESTERN AUSTRALIA   THE ARMY AUSTRALIAN   DST GROUP   Science and Technology for Safeguarding Australia

HPR*net*
Human Performance Research
network

Project Design

1 **Research Questions**
- What does team resilience look like in the Army?
- When does it matter for Army teams and why?
- How can Army facilitate team resilience?

3 **Deliverables**
- Conceptual model of team resilience
- Scoping review of team resilience literature
- Behavioural observation tool
- Strategies to foster individual- and team-level factors that maximise team resilience

2 **Experimental Methodology**
- Systematic review
- Reliability and validity of point of care assessment of salivary cortisol and a-amylase
- Agent-based modelling (ABM)
- Longitudinal observations of teams in lab/ field (e.g., surveys, GoPros, physiological indices)
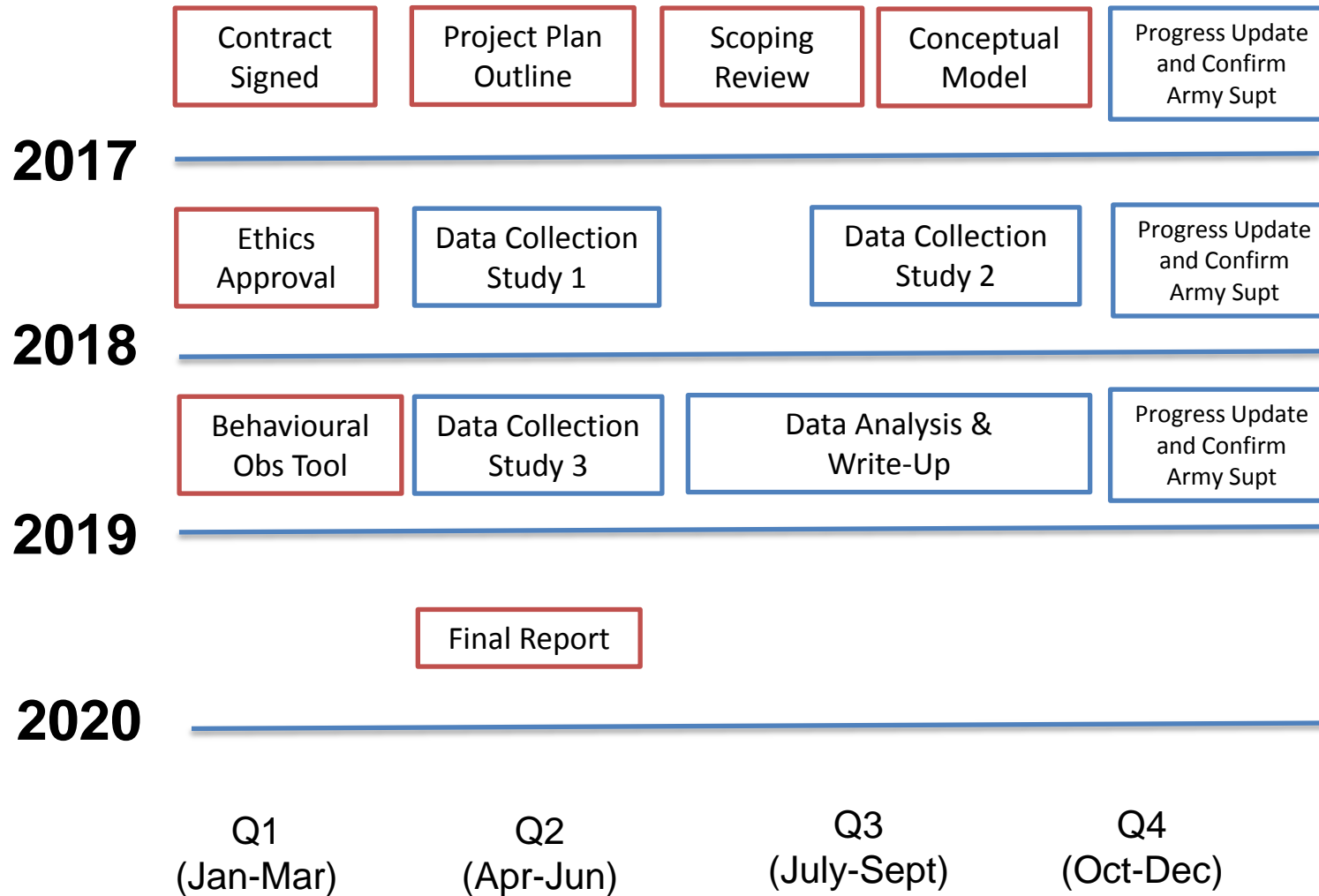- Data-prompted interviews and focus groups

4 **Timelines**
- Scoping review (completed & submitted)
- Conceptual paper (completed & submitted)
- iPRO reliability and validity study (completed, data analysis)
- ABM simulations (~ Oct 2018)
- Field and/or lab studies (TBD)

Curtin University | MACQUARIE University SYDNEY·AUSTRALIA | THE UNIVERSITY OF WESTERN AUSTRALIA | THE ARMY AUSTRALIAN | DST GROUP | **Science and Technology for Safeguarding Australia**

Timelines

	Q1 (Jan-Mar)	Q2 (Apr-Jun)	Q3 (July-Sept)	Q4 (Oct-Dec)
2017	Contract Signed	Project Plan Outline	Scoping Review	Conceptual Model / Progress Update and Confirm Army Supt
2018	Ethics Approval	Data Collection Study 1	Data Collection Study 2	Progress Update and Confirm Army Supt
2019	Behavioural Obs Tool	Data Collection Study 3	Data Analysis & Write-Up	Progress Update and Confirm Army Supt
2020		Final Report		

Legend: Activity / Deliverable

Curtin University

MACQUARIE University SYDNEY·AUSTRALIA

THE UNIVERSITY OF WESTERN AUSTRALIA

THE ARMY AUSTRALIAN

DST GROUP

Science and Technology for Safeguarding Australia

HPR*net*
Human Performance Research
network

Progress, challenges & opportunities

❑ Progress
 ▪ Conceptual model of team resilience (completed and submitted)
 ▪ Scoping review of team resilience literature (completed and submitted)
 ▪ iPRO reliability and validity study (completed, data analysis)
 ▪ PhD student (Mike Chapman) candidacy
 ▪ Negotiations with Army underway to identify data collection opportunities

❑ Challenges
 ▪ Lack of clarity regarding Army perspective on the 'problem statement'
 ▪ Access to Army units to discuss project and obtain buy-in
 ▪ Data collection timings need to be synchronised with Army training schedules
 ▪ Longitudinal observation designs – sample size, drop-outs, intact teams
 ▪ Managing unit expectations about outcomes (e.g., not delivering resilience training)
 ▪ Unavailability of a dedicated Army liaison officer/point of contact in planning phases
 ▪ Ensuring sufficient 'adversity' in environment to study team resilience emergence

❑ Opportunities
 ▪ Plenty of Army units to choose from; AHQ guidance to focus on Combat Corps
 ▪ Other opportunities will become clearer once we have confirmed partners within Army

Curtin University | MACQUARIE University SYDNEY·AUSTRALIA | THE UNIVERSITY OF WESTERN AUSTRALIA | THE ARMY AUSTRALIA | DST GROUP | Science and Technology for Safeguarding Australia