

# Violence Research Centre



INSTITUTE OF CRIMINOLOGY

## ***D2M: A 'decade-to-minutes' multi-timeframe study of aggression***

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# Background

- **Processes underlying aggression play out over timescales from milliseconds to decades**
    - Slowly evolving processes in ‘developmental time’
    - Momentary processes in ‘real time’
    - Interplay across timescales
      - Daily experiences  $\leftrightarrow$  traits
- Acknowledged in major theories of aggression
- General aggression model
  - I<sup>3</sup> Theory
  - Situational action theory
  - General theory of crime
  - Etc...



*‘There are multiple clocks that time us’  
Featherman and Petersen (1986)*

# But a gap in data...

- Previous studies of aggression are **EITHER** long-term **OR** momentary

## Longitudinal studies like z-proso...

- Measure aggression and related constructs every 1-3 years
- Focus on 'trait' measures: *'what are you like in general?'*
- Inferences about slowly evolving developmental processes



## Experience sampling studies...

- Measure changes in aggression over short timescale (e.g. 1 week)
- Focus on 'momentary' measures: *'what are you thinking/doing/feeling right now?'*
- Inferences about 'real-time' processes of aggression



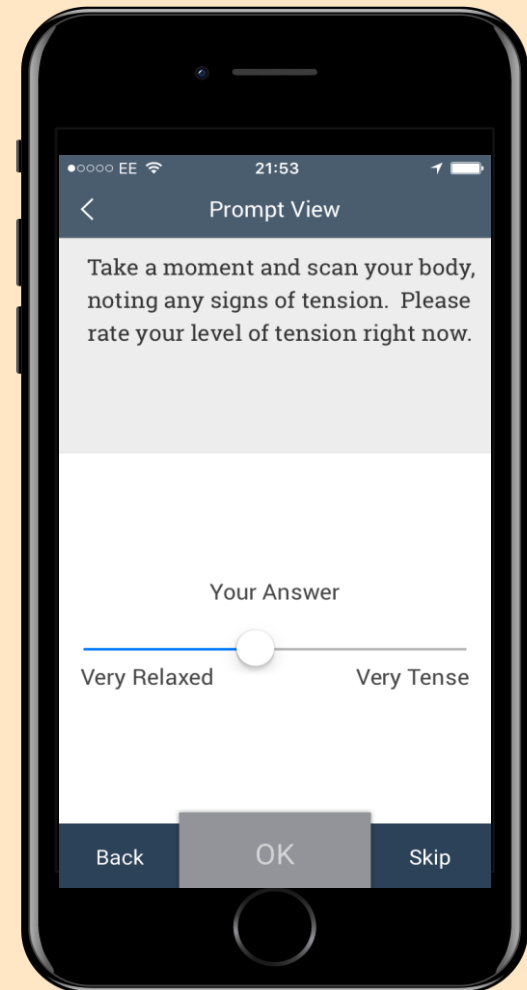
# In D2M we want to bridge this gap...

- Link longitudinal data from z-proso to newly collected 'momentary' experience sampling data
- Purpose is to understand the 'day-to-day' profiles of people with different long-term aggression trajectories?



# How we will do this?

- **Experience sampling**
  - Take an  $n=300-500$  subsample of z-proso
  - Collect information about thoughts, feelings, behaviours in near real time and in the flow of participant daily lives
  - Uses an app downloaded to their smartphone
  - Participant receives notifications to complete questions within the app
  - < 3 mins , 4x a day
  - 2 week duration



# What will we ask?

- **Context**
  - Where are you? What are you doing? Who are you with?
- **Provocations**
  - Did someone/something annoy you?
- **Emotions**
  - To what extent do you feel angry, happy, sad etc..
- **Thoughts**
  - E.g., Did you think about hurting someone?
- **Aggressive Behaviour**
  - E.g., Did you shout at someone?



# What are our research questions?

- **Do people with different developmental histories of aggression show:**
  - Differences in day-to-day aggressive, thoughts, emotions, behaviours, provocations?
  - Differences in emotional lability?
  - Differences in strength of coupling between provocation, anger and aggression?
- **Does self-control moderate the intraindividual association between provocation, anger and aggression?**
- **Does emotional lability (estimated from the experience sampling data) mediate the association between ADHD trait levels and aggression?**

# How do we know it will work?

- **Pilot study in UK: MSc Dissertation by Tridip Borah**
  - Develop a new measure of aggression, the *Aggression-ES*
    - Pre-pilot interviews
      - Check content validity of items
    - Pilot with n=23 young adults in 8 day experience sampling survey



**Would you like to win two Amazon vouchers worth 150 pounds? \***

Are you between 18 and 29 years of age?

Do you currently reside in the U.K.?

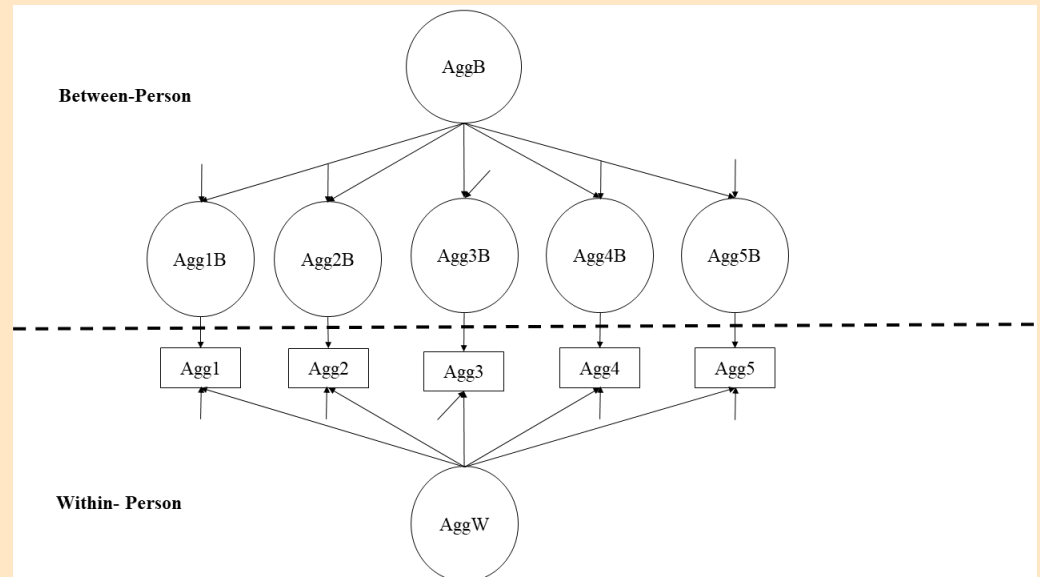
If you answered YES to all the questions above, we are looking for YOU!

Borah, T.J.,\* Murray, A. L.\*, Eisner, M., Jugl, I. (2018). Development and validation of an experience sampling measure of aggression. *Journal of Interpersonal Violence*. In press.



# Pilot study results

- **Psychometric results**
  - ML-CFA suggested good within- and between-person reliability
  - Within people, hostile affective states and provocations were associated with aggressive behaviour
  - Physical aggression items will be dropped for z-proso study (too rare)



# Pilot study results

- **Compliance and feasibility results**

- 80% of questions completed
- Only 3/23 participants dropped out
- ~70% of responses within 20 minutes of the prompt
- Asked if the prompts bothered, them, 58% of participants answered ‘not at all’ or ‘rarely’
- Number of prompts per day will be reduced for z-proso study

