

# The Three Circles App

Dylan Moloney-Gibb<sup>1</sup>, Dr Chase Sherwell<sup>1,2</sup>, Dr Sasha Lynn<sup>2</sup>, Prof Paul Gilbert OBE<sup>3</sup>, Dr James Kirby<sup>1</sup>,

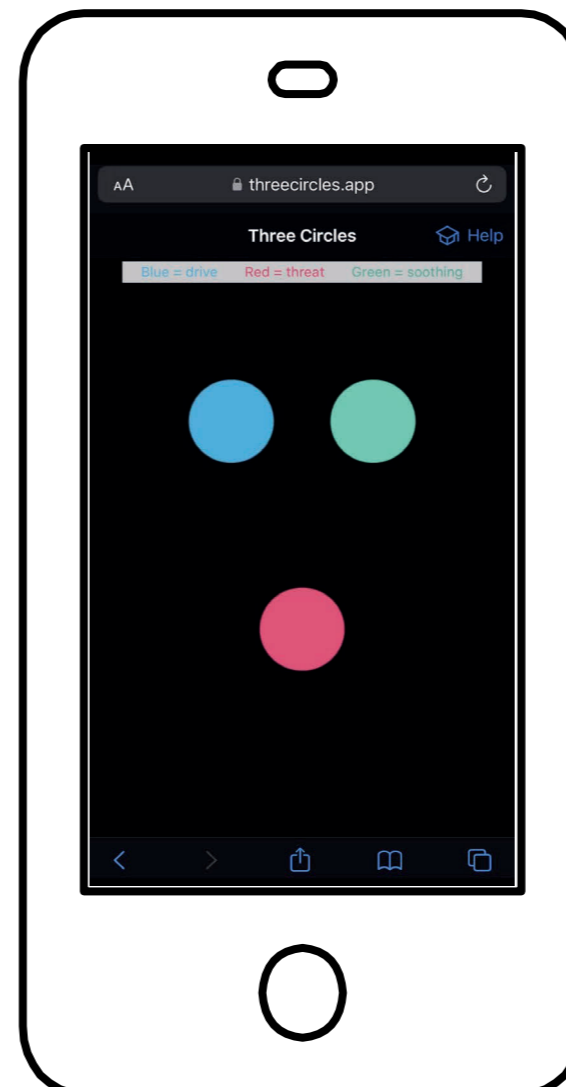
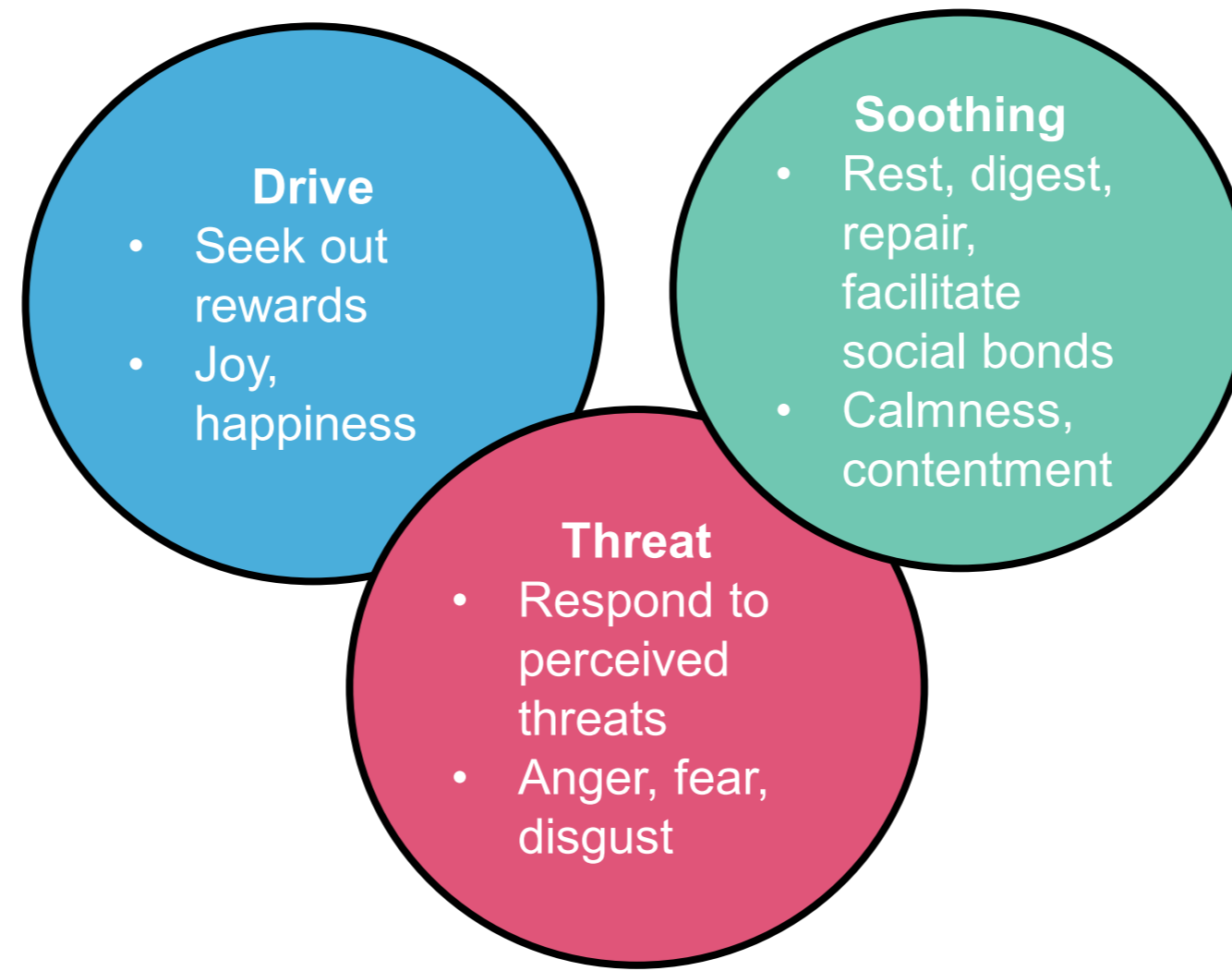
<sup>1</sup> School of Psychology, The University of Queensland, St Lucia, QLD, Australia

<sup>2</sup> School of Education, The University of Queensland, St Lucia, QLD, Australia

<sup>3</sup> College of Health, Psychology and Social Care, University of Derby, Derby, UK

## Rationale

- Tripartite model of emotion is proposed by compassion focused therapy (CFT) (Gilbert, 2009)
- Emotions are resultant from activity of three systems which motivate you to adapt to your environment
- Physiological evidence for model has been established (Depue & Morrone-Strupinsky, 2005; Sousa et al., 2021; 2022)
- CFT theory states that imbalance can result in emotion dysregulation
- A common exercise employed in CFT is drawing three circles to gauge the recent activity of the three systems
- We aimed to demonstrate construct validity of the new digital measure of emotion and motivation by examining cross-correlations with conventional psychometrics



Scan the code to try the Three Circles!



## Methods

- Aim was to validate the Three Circles with established measures of emotion in 311 young adults aged 18-25
- Participants completed an online questionnaire consisting of demographic questions and conventional ratings of emotion, then rated how their Three Circles had been over the day, and the past week,
- Hypothesised that individual circles would correlate with reported emotions in ways that reflect the underlying emotion motivation systems both 'right now' and 'over the past week'
- Theorised that soothing and threat circles should counterbalance each other per CFT theory; drive should only map to itself
- Coregulation between the circles is theorised to be reflected in measures of psychological distress and difficulties in emotion regulation
  - High threat system dominance = high scores on clinical measures
  - Imbalance between the circles should predict higher scores on clinical measures

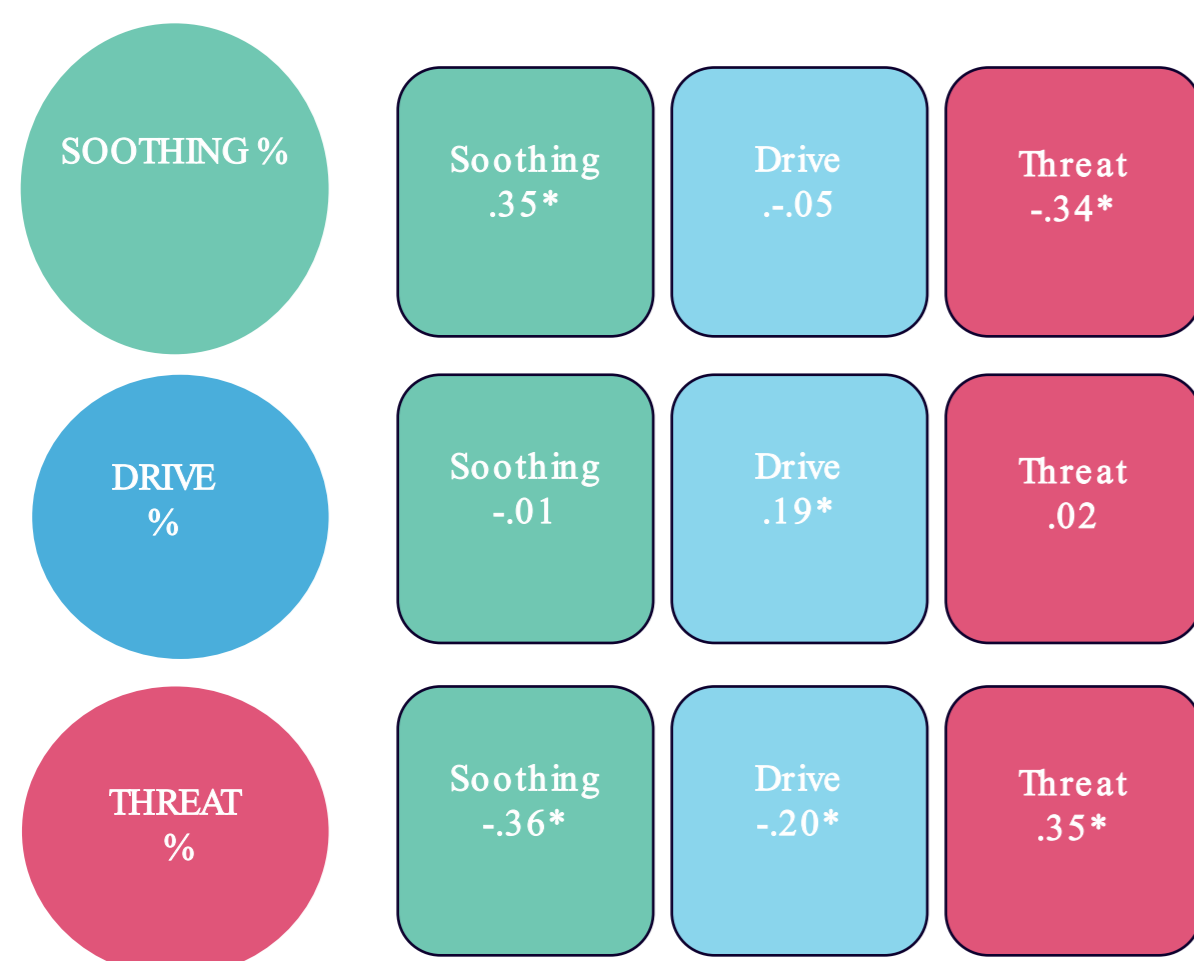
## Discussion

- The Three Circles appear to map to emotions consistently with predictions, aside from threat circle dominance also being negatively associated with ratings of drive-based emotions, not just soothing ones
- (ie. If you have a large red circle, you won't say you're feeling joyous OR calm)
- Over longer periods of time, participants appear to conceptualise the week as either "good" or "bad", and differentiate less between types of good
- Imbalance as a variable appears not to be predictive of psychological distress or difficulties in emotion regulation; high threat dominance and low soothing dominance appears to be responsible for this
  - Drive circle dominance was also found to be inversely predictive of depression
- The lack of predictive value of the imbalance variable may be explained by the adaptive nature of the three systems; they are meant to continually compensate for environmental stimuli, and so circle configurations may be more or less suitable depending on context

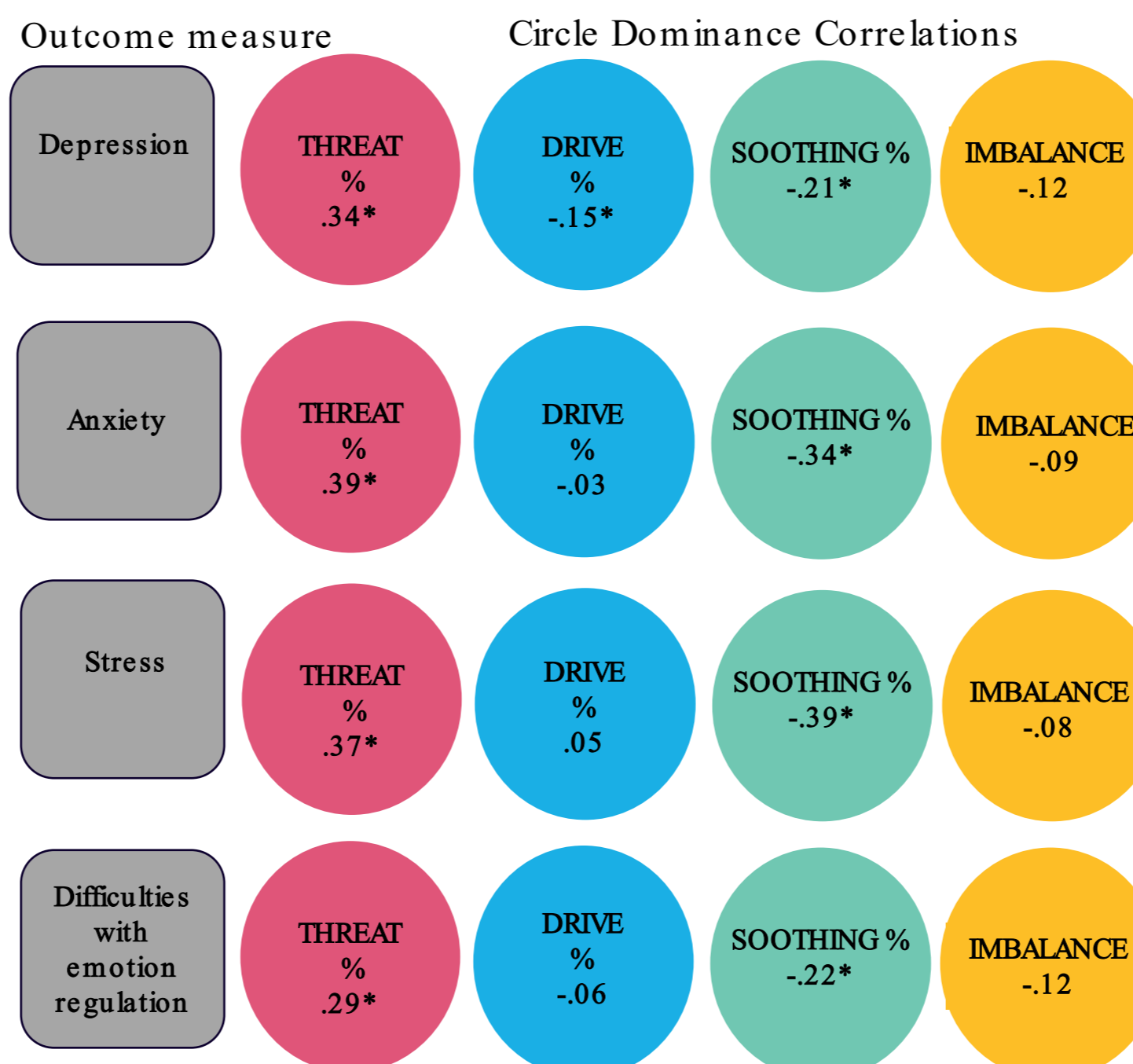
## Results

Correlations between state Three Circle ratings and ratings of emotion via conventional psychometrics

State Affect

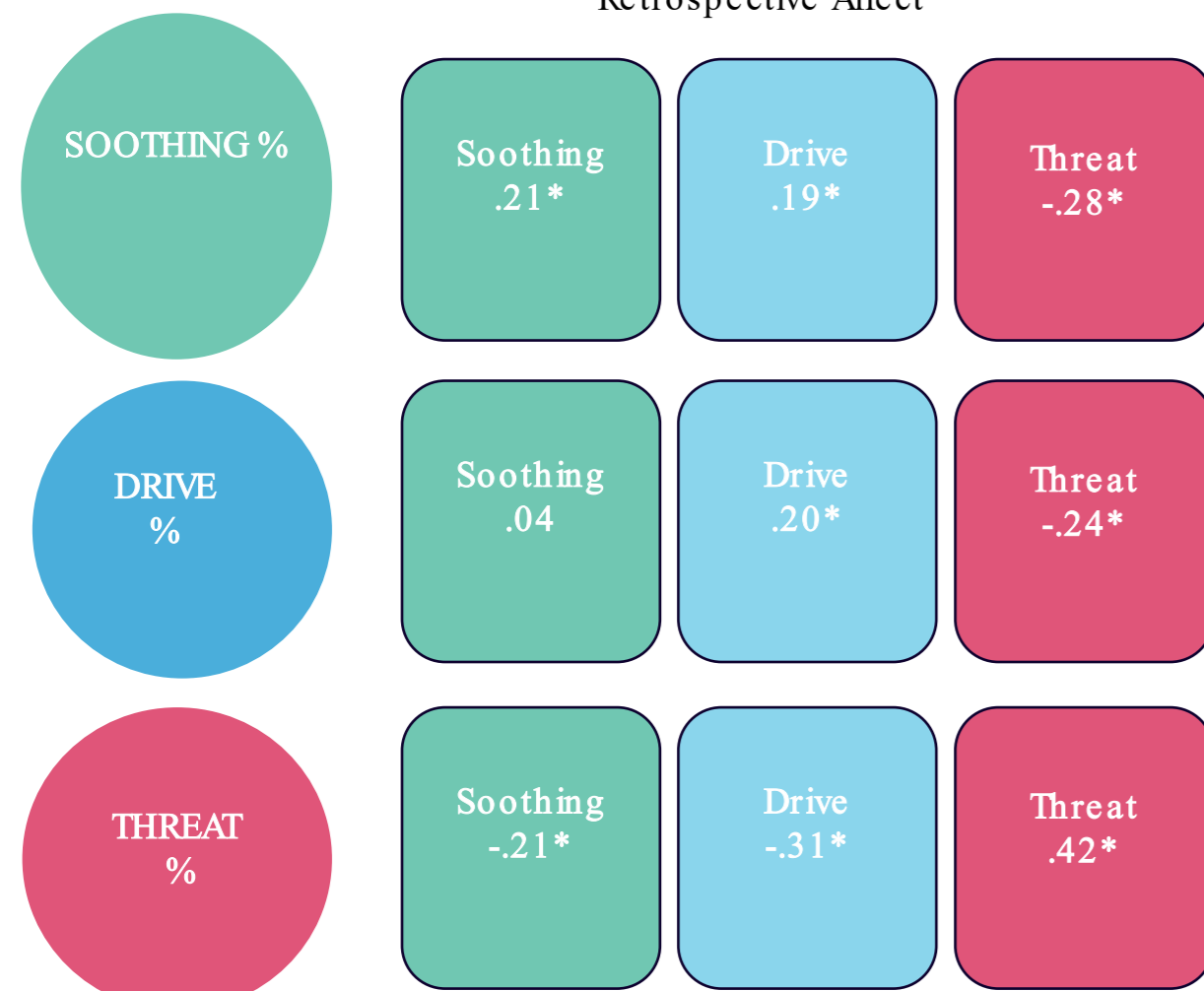


Correlations between psychological distress/emotion regulation and Three Circles – retrospective ratings



Correlations between retrospective Three Circle ratings and retrospective ratings of emotion via conventional psychometrics

Retrospective Affect



## THREE CIRCLES ADOLESCENT STUDY

- We are currently in the process of validating the Three Circles for use with adolescents
- Ethical approval granted; study has begun with over thirty 12 – 17 year old participants so far
- Survey link ready to be disseminated; psychoeducational resources and seminars are offered as incentive to participate
- Volunteer schools from Independent Schools Australia are welcomed
- Please email Associate Professor Dr. James Kirby at [j.kirby@psy.uq.edu.au](mailto:j.kirby@psy.uq.edu.au) to enquire, or alternatively, scan the QR code to the right, provide your details, and we can contact you

Register your interest in participating using the code below!



✉ [d.moloneygibb@uq.edu.au](mailto:d.moloneygibb@uq.edu.au)