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I know I'm happy, and I'm right: Metacognition of emotion

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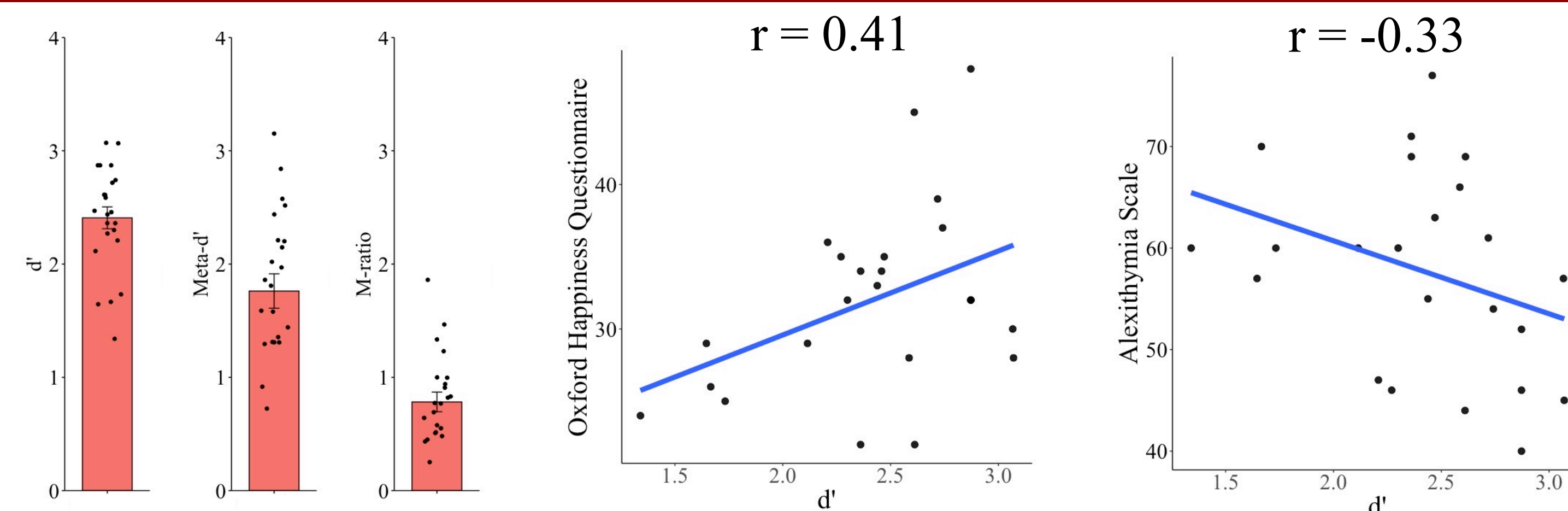
Introduction

- Can we monitor our emotion experiences accurately?
- Monitoring our emotions allows us to regulate and avoid negative emotions while zoning into positive ones, such as flow.
- However, no previous studies have provided a quantitative index of metacognition of emotion.
- Hence, the aim of the present study was to develop a quantitative and experimental measurement of the metacognition of emotion.

Methods

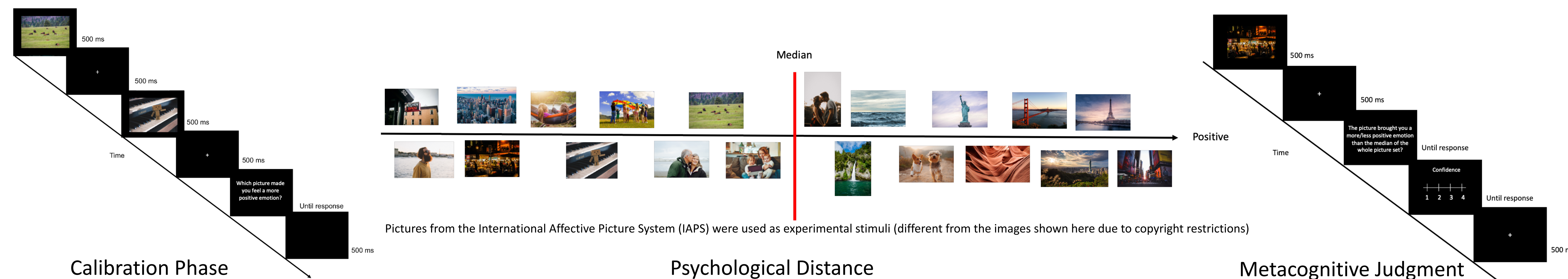
- N = 23 (age range 20-35). Participants were instructed to complete the Body Awareness Questionnaire (BAQ), Alexithymia scale, Positive and Negative Affect Scale (PANAS), Emotion Regulation Questionnaire (ERQ), Five-facet Mindfulness Questionnaire (FFMQ), and Oxford Happiness Questionnaire (OHQ).
- Psychological distance capturing the relative positivity of emotion induced by each picture was computed via the law of comparative judgment (Thurstone, 1927).
- Metacognition index: Signal detection theory (SDT)-based analysis (Maniscalco & Lau, 2012).

Results and Discussion



- d' , meta- d' , and M-ratio were found to be greater than zero.
- d' was positively correlated with Oxford Happiness Questionnaire score and negatively correlated with Alexithymia scale score.

- This study established the first experimental procedure for quantitatively measuring metacognition of emotion.
- The correlations between d' and the Oxford Happiness Questionnaire and Alexithymia scale provided the criterion-related validity that our paradigm does not focus on capturing picture likability or memory performance.
- As no correlations were found between M-ratio and other questionnaires, future work may further investigate what factors affect and/or are affected by the metacognition of emotion.



Type 1 SDT		Valence	
		Higher	Lower
Response	Correct	hit	FA
	Incorrect	miss	CR
Type 2 SDT		Confidence	
		High	Low
Decision	Correct	hit	FA
	Incorrect	miss	CR