Objective: The traditional conceptualization that delusions are fixated beliefs has been challenged by recent studies, suggesting that there are in fact several delusional dimensions, including conviction, distress, preoccupation and disruption. Past literature suggested that various factors might have contribution to different delusional dimensions. To gain better insight into the daily experience of delusions, the current study utilized a computerized Experience Sampling Method (ESM) to investigate whether (a) patients with reasoning biases (JTC bias, belief inflexibility and externalizing attributional style) would show higher average levels of conviction; (b) patients with problematic emotional cognitive styles (worry, trait anxiety and interpersonal sensitivity) would show higher average levels of distress and disruption to life and (c) there would be differential impacts of cognitive reasoning biases and emotional cognitive styles on different delusional dimensions.

Method: Twenty-seven patients with non-affective psychosis completed clinical measures, self-report questionnaires and momentary self-reports generated by a smartphone 'application' (or 'app') 10 times per day, over 6 consecutive days. Statistical procedures were carried out using version 20 of SPSS (SPSS, Inc., Chicago, Illinois). The associations between different delusional dimensions and potential correlates were analyzed using multiple linear regressions.

Results: Delusional dimensions of conviction, distress, disruption and preoccupation had different associations with different reasoning biases and emotional cognitive styles examined. Conviction was predicted by belief flexibility and trait anxiety while belief flexibility was a mediator of jumping to conclusions on delusional conviction. Distress was predicted by trait anxiety and pathological worry, while the impacts of worry on distress was largely mediated by trait anxiety. General pathological worry was also significant predictor for delusional preoccupation and disruption to life.

Conclusions: Present data identified differential impacts of reasoning biases and emotional cognitive styles on different delusional dimensions, which might contribute to future development of individualized interventions and specification of predicted outcomes for psychosis.