Persecutory delusions refer to the false beliefs that are fixed, and sometimes held with absolute conviction, that one is going to be harmed or harassed by an individual, organization, or other group. It is highly prevalent in individuals with schizophrenia and has a close link with the psychological processes implicated in the maintenance of mood disorders. In recent years, psychological models have been developed to understand the development and maintenance of persecutory delusions, emphasizing on the underlying cognitive and affective factors. One of the important cognitive factors is attributions, which is the way by which people infer the causes of events. In individuals with persecutory delusions, previous studies generated an increasing evidence for self-serving and personalizing biases. Preliminary evidence also suggested that these attributional biases are closely associated with negative mood states, which play an important role in the development and maintenance of persecutory delusions. The current study aimed to investigate the relationship between attributional biases and negative mood states in individuals with persecutory delusions, and to explore the role of explanatory flexibility in moderating this relationship.

A total of 24 patients and 26 healthy controls were recruited. Patients and controls were matched in terms of age, sex, and education level. They were asked to complete a battery of clinical, self-rated, and cognitive assessments. Patients and controls were compared in terms of their attributional biases and negative mood states. Correlational analyses were conducted to examine the relationships between attributional biases and negative mood states. Exploratory analyses were also carried out to investigate the moderating role of explanatory flexibility.

When compared to healthy controls, it was found that patients had a significantly higher globality score for negative events. They also had a higher stability score for negative events and a higher globality score for positive events at trend level. There were no significant group differences on attributional biases, but the severity of persecutory delusions was positively correlated with the degree of self-serving bias. In terms of negative mood, patients had a significantly higher level of negative mood states (anxiety, depression) and traits (anger, anxiety, depression) than controls. Correlational analyses revealed that state anxiety was significantly and positively correlated with self-serving

bias in the patient group. No significant correlations were found between state anger and personalizing bias or between state depression and self-serving bias. Patients and healthy controls had comparable levels of explanatory flexibility. Multiple regression analyses did not demonstrate that explanatory flexibility moderates the relationship between attributional biases and negative mood states.

Current findings were largely in keeping with that of previous studies. Discrepant findings may be due to the small number of participants in the current study and the different clinical profile of participants across studies. On the whole, this study provided valuable information regarding the relationship between attributional biases and negative mood states. Preliminary analyses on explanatory flexibility also allowed future studies to further investigate its role in attributions and mood.