

CONFUSION  
HALLUCINATIONS  
DISORGANIZED SPEECH  
**SCHIZOPHRENIA**  
DISORGANIZED THINKING DELUSIONS  
ABNORMAL MOTOR BEHAVIOR  
DISORGANIZED THINKING  
CONFUSION  
HALLUCINATIONS



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## SCHIZOPHRENIA Factsheet

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### What are positive symptoms of schizophrenia?

Positive symptoms are a well-documented feature of schizophrenia and are arguably the most recognisable and conspicuous symptoms. Positive symptoms include hallucinations and delusions. Hallucinations are defined as a perceptual experience that occurs in the absence of any external sensory input, and are most commonly auditory, but can occur in any modality. Delusions are distortions or exaggerations of inferential thinking, which lack any logical consistency, are not explained by cultural beliefs, and persist regardless of contradictory evidence. Persecutory delusions involve the belief that people are “out to get” the individual, resulting in a lack of trust in others. Delusion of reference refers to the belief that neutral events are directed specifically towards the individual. Somatic delusions involve the belief that the individual has a physical ailment contrary to medical advice. Delusions of grandeur are characterised by an exaggerated belief that the individual has power, ability, or fame. Positive symptoms can cause extreme distress for the sufferer. The severity of positive symptoms can significantly affect a person’s day-to-day function, quality of life, and may also be associated with impaired cognitive ability. Positive symptoms have been shown to be more responsive to antipsychotic treatment than other symptom dimensions.

### What is the evidence for positive symptoms?

Moderate quality evidence finds features of hallucinations are similar across psychiatric conditions, apart from age of onset of hallucinations, which is earlier in non-clinical and dissociative disorder groups (<12 years) than in schizophrenia (late teens to early 20s), and is later in affective disorders, neurological disorders, and alcohol-related conditions (middle or older age). The prevalence of visual hallucinations in people with schizophrenia is around 27%, and the prevalence of auditory hallucinations is around 59%. These rates are higher than in affective psychosis (visual = 15%, auditory = 28%). They are also higher than general population rates (7%), but lower than in Parkinson’s disease (15-40%), dementia with Lewy bodies (60-90%), age-related eye disease (10-60%), and death-bed visions (50%). In schizophrenia, visual hallucinations are associated with more severe psychopathological profile and less favourable outcomes; they are complex, negative in content, and are interpreted to have personal relevance.

Moderate to high quality evidence finds medium-sized associations between increased maladaptive appraisals and beliefs about voices and increased voice-related and emotional distress. Maladaptive appraisals and beliefs include perceived power, intrusiveness, dominance, malevolence, lack of control, and metaphysical beliefs. Positive appraisals and beliefs about voices showed a small association with reduced distress.

Moderate to high quality evidence finds small to medium-sized relationships between increased paranoia and low self-esteem or increased externalising attributional bias (incorrectly holding others responsible for negative events). Increased paranoia was also associated with seeing others as controlling, dangerous, and rejecting. Compared to controls, people with psychosis and persecutory delusions show a medium-sized effect of more externalising attributional bias, a large effect of low explicit (conscious) self-esteem, and a small to medium-sized effect of low implicit (unconscious) self-esteem. Compared to people with depression, people with psychosis and persecutory delusions show a large effect of more externalising attributional bias, a large effect of more explicit self-esteem, with no differences in implicit self-esteem. Compared to people with psychosis without persecutory delusions, people with psychosis and persecutory delusions show a medium-sized effect of more externalising attributional bias, with no differences in explicit or implicit self-esteem.

High quality evidence finds a medium-sized association between more severe delusions and more belief inflexibility. There were medium to large effects of more jumping to conclusions, bias against disconfirmatory or confirmatory evidence, and more liberal acceptance in people with schizophrenia with current delusions compared to controls or people with schizophrenia who do not experience delusions. There was also a medium-sized relationship between poor insight (overall unawareness of having a mental disorder) and increased reality distortion.

For further information see the technical table



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*NeuRA (Neuroscience Research Australia) is one of the largest independent medical and clinical research institutes in Australia and an international leader in neurological research.*

*Diseases of the brain and nervous system pose the greatest health, economic and social burden of any disease group because they are chronic, debilitating and have no known cures.*

*Medical research is the cornerstone of efforts to advance the health and wellbeing of families and the community. Our dedicated scientists are focussed on transforming their research into significant and practical benefits for all patients.*

*While we hope you find this information useful, it is always important to discuss any questions about schizophrenia or its treatment with your doctor or other health care provider.*

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