

# **CBT for a Person With Schizophrenia: Systematic Desensitization for Phobias Led to Positive Symptom Improvement**

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**Abstract.** Affective symptoms are often present and under-treated in schizophrenia. This case study reports the effect of treatment of a specific phobia and associated avoidance on the psychotic symptoms of a patient with medication resistant schizophrenia. The treatment of the specific phobia and agoraphobia followed a traditional systematic desensitization procedure. The successful treatment of the phobias led to improvements in psychotic symptoms. Previously, the client had only a limited response to a number of antipsychotic medications including clozapine but responded well to a traditional systematic desensitization program that produced positive consequences for the psychotic symptomatology. The clinical and theoretical aspects of this case are discussed.

*Keywords:* Cognitive therapy, psychosis, schizophrenia, anxiety, agoraphobia.

## **Introduction**

Schizophrenia is a diagnosis that has attracted considerable comment and criticism. Alternative approaches to the syndrome approach have included a symptom approach that emphasizes the similarities rather than differences from other emotional problems (Morrison, 2001). This calls into question the utility of the traditional neurosis versus psychosis divide in classification if common processes operate in both. We reviewed the symptoms reported by 421 patients who participated in a recent research trial of CBT for psychotic illness (see Turkington, Kingdon and Turner, 2002 for full details of participants). It is apparent that the rate of anxiety symptoms was high (see Table 1) with 24.5% reporting phobic symptoms (a score of 2 or more). It would seem that people with psychotic illness often experience symptoms that are not always a direct consequence of the psychotic illness itself. Clearly, these may be as distressing and may be legitimate targets for intervention.

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**Table 1.** Types and number of people reporting different anxiety symptoms in 421 people with a diagnosis of schizophrenia assessed pre treatment. Symptoms are measured by the Comprehensive Psychopathological Rating Scale (Asberg, Montgomery, Perris, Shalling and Sedvall, 1978). Scores range from 0 (no difficulties) through to 3. A score of 2 or above indicates considerable distress or disruption

Score	CPRS items			
	Inner tension	Hypochondriasis	Worry over trifles	Phobias
0	191	317	282	236
1	158	77	78	82
2	67	25	50	90
3	5	2	11	13

A recent case study (Good, 2002) reported that the treatment of a co-morbid anxiety disorder (social phobia) led to marked improvements in psychotic symptoms without these ever being directly addressed. This alleviation of distressing symptoms is interesting clinically and theoretically (Freeman and Garety, 2003). Here we report a similar approach with a man with paranoid beliefs.

### Assessment

Mark, 38, had suffered with paranoid schizophrenia for 8 years (in order to retain the person's anonymity a number of features of the history and presenting difficulties have been changed). He had been admitted to hospital on five occasions. Mark has been prescribed many anti-psychotic medications over this time, including Clozapine but with little noticeable benefit. At assessment he was prescribed 500 mgs of Amisulpiride (200 mgs mane, 300 mgs nocte). He was referred for CBT owing to his ongoing persecutory delusions, which had been present since he was first diagnosed with schizophrenia.

At assessment Mark reported difficulties in a number of different areas. He reported that when he was out walking, people were coughing as he walked past. This coughing indicated that these people were aliens who were part of a conspiracy to replace all the people on earth. This replacement caused him great distress and worry. Mark also reported auditory hallucinations of sounds, and derogatory comments. Another area of difficulty Mark described was his fear of dogs. Mark felt very fearful that he would be attacked by dogs. He traced the onset of his fear to when he was an inpatient and a large dog jumped up at him whilst he was in hospital grounds. The fear of dogs and his fears of the conspiracy meant that he found it very difficult to go out and he reported problems being in busy places or travelling on public transport. He spent most days in his flat alone. He had not worked for many years and received appropriate benefits.

### Treatment

Mark placed his fear of dogs at the top of his problem list and it was accorded the greatest priority. Thus, we began with this problem using a standard habituation program. The

habituation rationale was explained. In order to expose Mark to his feared stimuli, Mark and the therapist (RD) spent time at a local animal shelter. This enabled us to assess the anxiety he felt around dogs and produced a graded hierarchy of feared dogs. As the local shelter allowed people to exercise the dogs, we began to walk dogs to enable us to get closer to them. Mark's anxiety levels before, during and after the sessions were recorded. Mark was hyper-vigilant to the presence of other dogs and this maintenance factor was illustrated with experiments that altered his attentional focus. Mark continued this work with the help of an assistant psychologist (JD) and worked through a hierarchy of feared situations. Anxiety levels habituated over time and at the end of this work, Mark was reporting minimal or no anxiety walking any size of dog.

Owing to this success, we moved on to the next item on the problem list; his avoidance of public places, which was caused by his fear of the conspiracy. This once again was treated with an habituation rationale. This was accepted readily owing to the success of its use with the dog phobia. However, there was an additional component. Prior to the first exposure task, time was spent considering his experience of hearing coughing and this being evidence of a conspiracy. We spent time generating alternative explanations for people coughing, including obvious causes such as colds or flu. Another explanation added was that perhaps Mark was experiencing auditory hallucinations. Data indicating the prevalence of such experiences in the general population were commented upon to indicate that it is not hallucinatory experiences per se that is the problem, but the interpretation of them. This information was used as part of a normalizing rationale (Kingdon and Turkington, 1994) explaining that hallucinatory experiences may be common when someone is stressed and are not necessarily indicative of an illness like schizophrenia. This information allowed us to speculate on a number of possible alternative explanations for coughing prior to our behavioural experiments.

On the first occasion RD accompanied Mark around a busy town centre to record how often we heard people cough. Mark reported far more instances than the therapist and this was attributed to the role of attention, either by increasing his attention to real coughing around him or by altering his focus of attention and hence increasing hallucinatory phenomena. Hence, we used distraction to determine whether they may be contributing factors. When distracted Mark reported fewer instances. Mark then understood that he had some ability to control his experiences of distress.

Subsequently, we devised a hierarchy of feared situations including local roads and estates and the habituation program was undertaken once again with the help of JD. Mark then implemented this on his own. Further work involved understanding the onset of his illness in terms of a stress vulnerability model and using a normalizing rationale to decatastrophize his fears over his diagnosis (Kingdon and Turkington, 1994). Mark had 18 sessions with RD and 20 sessions with JD.

### Outcome

Mark completed his exposure programs for overcoming his fear of dogs and his avoidance of being outside. At the end of treatment he reported being able to go out more freely and his scores on the mobility inventory reflected this improvement (see Table 2). His scores placed him outside of the clinical norms (Chambless, Caputo, Jasin, Gracely and Williams, 1985). He reported still being anxious when he saw large dogs, but he no longer avoided them.

**Table 2.** Mark's scores on a measure of agoraphobia and a measure of psychotic phenomena

Assessment	Pre treatment	Post phobia exposure work	Post agoraphobia work	Post treatment	6 month follow-up
<b>PSYRATS</b>					
PSYRATS total	30	28	18	15	13
PSYRATS voices	17	17	10	8	8
PSYRATS delusions	13	11	8	7	5
<b>PSYRATS delusions subscales</b>					
Amount of preoccupation with delusions	2	2	1	1	1
Duration of preoccupation with delusions	2	1	1	1	1
Conviction	3	2	2	2	0
Amount of distress	2	2	1	1	1
Intensity of distress	2	2	1	1	1
Disruption to life caused by belief	2	2	2	1	1
<b>Mobility Inventory for Agoraphobia</b>					
Mean score accompanied	3.0	2.8	2.3	2.2	2.1
Mean score alone	3.6	3.4	2.9	2.9	2.3

Furthermore, the psychotic symptoms, as measured on the PSYRATS (Haddock, McCarron, Tarrier and Faragher, 1999), an observer rated assessment of psychotic symptoms undertaken by the therapist, who was obviously not blind to the treatment condition, also indicated considerable improvement, especially in relation to the persecutory belief. What is interesting is that we did not directly address the fears that there is a conspiracy against him and that the world is full of impostors. Rather, we worked from his problem list and initially worked on his specific phobia. Then we used this success to move on to work on the avoidance of public places. In order to help overcome this fear, we generated alternative explanations as to why people may cough when he is near by. This included the idea that he may be hearing sounds that others do not. This rationale was not upsetting as voices were considered to be non-pathological experiences. This alternative and believable rationale seemed to decrease belief in the delusional interpretation (see Table 2). Consequently, as measured on the PSYRATS there is still the presence of hallucinatory experiences but they no longer provoke distress. Mark has remained better for a period of 6 months.

### Discussion and conclusions

This case report describes the treatment using CBT of a man who had shown only partial response to antipsychotic medication including Clozapine. The point of interest for us in this work is the improvement in Mark's delusional beliefs with minimal direct addressing of this area. We provided an alternative rationale for his experiencing coughing without disputing the evidence that he was or was not being conspired against.

A number of factors may have contributed to this successful intervention. Firstly, we worked from the problem list, from which Mark prioritized the dog phobia. This reflects the

collaborative nature of CBT and avoided us trying to dispute the evidence for the delusional beliefs when Mark did not want to work on this area (Chadwick, Birchwood and Trower, 1996; Fowler, Garety and Kuipers, 1995). This specific phobia work allowed us to provide a strong psychological rationale for his distress and a success experience in reducing this problem. This facilitated the next step of addressing his avoidance of public places and the concern of the conspiracy. We had a good trusting relationship, and an experience of success. The next step was to move from a purely exposure based habituation paradigm to one where the work provided an opportunity to test ideas in the form of behavioural experiments rather than just be exposed to fears. An important component of this work was the provision of information about hallucinations being relatively common and not necessarily being indicative of madness. This provided a sound alternative explanation as to why Mark was hearing coughs when others did not and what it may mean. Mark found this rationale of value and was not distressed by the thought that he may experience hallucinations. Whilst valuable for Mark, there may be a potential ethical issue in the provision of this sort of alternative rationale for his experiences. Whilst Mark and the therapist may not regard hallucinatory experiences as necessarily pathological, it is not true to say that the system within which he is treated would necessarily regard hallucinations in the same way. It would seem that this indirect route to reduction in psychotic symptomatology would not be suitable for all. Mark took well to the habituation rationale and in terms of his delusional beliefs expressed some doubt and considered he could possibly be mistaken. This cognitive flexibility may be a predictor of better response to CBT for delusional beliefs. It is important to bear in mind that the anxiety treatment was not exactly the same as some anxiety or phobia work. The treatment was much longer than standard anxiety work.

Anxiety and other symptoms are prevalent in people with psychotic illness. Directly addressing these symptoms appears to potentially reduce the distress associated with psychotic symptoms, even when these are not the direct target of intervention. This adds to our growing understanding that there may be, in fact, many routes to change and that it is not necessary to directly address the psychotic symptoms in order to create reductions of distress and disability in these experiences (see Hall and Tarrier, 2003; Key, Craske and Reno, 2003).

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