Social Phobia and Depression in Psychosis

The role of emotion in psychosis has been neglected, which has led to emotional problems been under-recognized and rendered subordinate to the psychosis symptoms. Few effective therapeutic treatments have been introduced for the management of emotional disorders in psychosis.

TEKST
Maria Michail
Max Birchwood

PUBLISERT 4. mai 2007

ABSTRACT:

Emotional dysfunction is pervasive in psychosis. Social anxiety and depression particularly are among the commonest problems encountered before, during and even in the aftermath of psychosis. The pathogenesis of these disorders though still remains unclear and the need to identify their developmental and psychological origins is of fundamental importance. In this paper, social anxiety and depression are viewed from a social rank perspective. Based on preliminary findings (Michail & Birchwood, in preparation), it is suggested that shamefulness about mental illness, fear of discovery of the illness and efforts to conceal it from others contaminate social interactions giving rise to social anxiety. Depression in schizophrenia is found to be related to appraisals of the illness as a life event entailing loss, humiliation and entrapment. Implications for psychological interventions and treatments of emotional disorders in psychosis and associated distress are discussed.

Keywords: emotional dysfunction, social anxiety, shame, social rank theory, entrapment, humiliation, cognitive-behavioural therapy

Emotional Dysfunction in Psychosis

During the nineteenth century, when the concept of psychosis was first introduced (Feuchtersleben, 1845; cited in Beer, 1996), it was used to refer to severe mental illness – illness of the mind – and was regarded as a sub-category of neuroses which at that time were characterized by an organic etiology. However, this soon changed, especially after the introduction of the term "psychoneurosis" by Damerow, which signifies the unity of psychosis and neurosis under the assumption that they both share an organic aetiology (Beer, 1996). Subsequently, the concept of psychoneurosis underwent changes and acquired a psychological meaning especially with the introduction of psychoanalytical

theory. According to Freud, neuroses were characterized by an underlying, unconscious aetiology and in that respect were related to psychoses which signified "...a disturbance between the ego and the outside world" (cited in Beer, 1996, pp. 241–242).

During the twentieth century the relationship between psychosis and neurosis was neglected. Instead, theories about the dichotomy between the two concepts primarily based on distinct etiological origins were receiving considerable attention. Kraepelin was among the most influential in classifying neuroses, which were initially regarded as conditions of physical cause. Later on, however, he postulated that neuroses were partly characterized by a psychogenic (e.g. nervous exhaustion) and partly by a constitutional nature (e.g. hysteria) (Beer, 1996). Jaspers (1959, cited in Beer, 1996) provides a clear and sharp distinction between neurosis, psychosis and psychopathy on the basis of the pervasiveness of the illness. Specifically, he suggests that neuroses are psychic deviations that contrary to psychoses, which are more pervasive, do not affect the individual as a whole. In terms of diagnosis and treatment of schizophrenia, therefore, Jaspers adopted a hierarchical approach wherein affective symptoms are "trumped" by the presence of those in schizophrenia. Schneider (1959; cited in Beer, 1996) also advocated the separation between neurosis and psychopathy from psychosis, which he referred to as mental abnormalities. The primary experiences, the first-rank symptoms as he called them, included thought disorder, auditory hallucinations, replacement of will and delusional perceptions. Those symptoms, in the absence of "organic" problems, were the ones used to determine the diagnosis of schizophrenia.

It is evident, therefore, how the role of emotion in psychosis has been neglected or simply understood as "co-morbidity", which has led to emotional problems been under-recognized and rendered subordinate to the psychosis symptoms. Furthermore, few effective therapeutic treatments have been introduced; rather it seems that therapeutic approaches for the treatment of emotional disorders in non-psychotic people have also been applied without modification for the management of emotional disorders in psychosis.

Recently, however, the possibility of important links between psychosis and neurosis is gaining ground based on substantial evidence from research and clinical practice showing that emotional problems are observed not only throughout the course of psychosis, but even before symptom formation (Birchwood, 2003; Freeman & Garety, 2003).

Emotional Dysfunction Prior to Onset of Psychosis

Important sources of evidence regarding the prominent role of emotion in psychosis are studies examining the developmental precursors and risk factors that lead to the development of psychosis. Adopting a retrospective method, these studies aimed at identifying those premorbid factors whose presence might enhance the probability of transition to psychosis in those individuals at high-risk. One of the most important attempts to identify those factors predicting the onset of schizophrenia and to compare the premorbid characteristics of those high-risk individuals who went on to develop

psychosis and those who did not, is the Edinburgh High-Risk Study (EHRS: Johnstone, Ebmeier, Miller, Owens, & Lawrie, 2005; Miller et al., 2002). A young sample of individuals aged 16-24 was identified as being at increased risk for developing schizophrenia due to having two or more affected first degree relatives. Miller et al. (2002) provided preliminary findings of the EHRS by comparing four groups of individuals: a control group, a high-risk asymptomatic group, a high-risk symptomatic group, and a group of first-episode psychosis patients. These were assessed on schizotypal symptoms in order to examine whether they could help in predicting the later development of schizophrenia. Among those factors predicting transition to psychosis, Miller et al. (2002) also reported the presence of social withdrawal and socioemotional dysfunction. Problems of introversion, social anxiety and isolation, blunting of affect, comprised those variables that distinguished individuals at high-risk who became ill from those who stayed well. These preliminary findings were supported by recent and more conclusive evidence from the EHRS (Johnstone et al., 2005). Johnstone et al. (2005) reported as the most significant predictive factors the presence of schizotypal cognitions and most importantly social withdrawal, social anxiety and introversion. It seems therefore that poor social adjustment combined with emotional problems, particularly social anxiety and signs of introversion, have been consistently detected in the developmental trajectory of those individuals who later develop psychosis.

Research supports a consistent pattern of emotional dysfunction in the developmental trajectory of those individuals who go on later to develop psychosis. Among those factors manifest in the premorbid developmental and social period, elevated levels of depression as well as social anxiety and the associated social withdrawal and isolation have been very prevalent, thereby indicating that emotional disturbance is a highly significant part and can precede the development of psychosis.

Emotional Dysfunction in the Prodrome Phase

Research has shown that emotional pro-blems and particularly depressed mood, anxiety and irritability are very prominent during the prodrome phase (Hafner, Loffler, Mauer, Hambrecht, & Heiden, 1999; Yung & McGorry, 1996). Using a retrospective method to investigate the prodromal characteristics of people with first-episode psychosis, Yung and McGorry (1996) reported that aside from attenuated psychotic symptoms and behavioural changes, individuals with first-episode psychosis reported elevated levels of depressive and neurotic problems. Hafner et al. (1999), in the ABC study, aiming to provide a thorough account of the early course of schizophrenia, reported two symptom categories that characterized this initial phase: negative and affective dimensions. The most frequently occurring prodromal sign reported in their sample was that of depression followed by symptoms of anxiety and worry which all belonged to the affective dimension. Aiming at examining whether early depression would predict the onset of positive and negative symptoms in the first episode of psychosis, Hafner et al. (1999) found that those individuals with depression scored higher on specific and non-specific neurotic syndromes as well as the psychosis-specific

syndrome assessed by the PSE. These early findings by Hafner et al. (1999) seem to be confirmed by a recently published study examining the frequency of clear-cut depressive symptoms in schizophrenia during the prodromal phase (Hafner et al., 2005). It was found that a significant number of people with first-episode psychosis (81%) were troubled by depressed mood associated with lack of self-confidence and feelings of guilt for at least two weeks prior to first admission. Furthermore, those individuals tended to show higher levels of positive, negative and depressive symptoms during their first episode compared to those who did not suffer from depression in the early stages.

Emotional Disorders During the Acute Phase of Psychosis

Depression: Recent attempts to validate the phenomenological domains of psychotic disorder have employed a dimensional approach derived from factor-analytic studies of psychosis symptoms. Early three-factor models (Liddle et al., 1993: positive, negative, disorganization) have given way to more complex models. McGorry et al. (1998) using a large first-episode sample found a four-factor model which comprised of: manic symptoms, depressive symptoms – feelings of hopelessness, worthlessness, depressed mood, guilt – Bleulerian factor (combination of negative symptoms, disorganization and catatonic features) and the Schneiderian factor (positive symptoms).

Two course patterns of depression in psychosis have been reported: a) depression which occurs during acute psychosis and relapse, following the same course as positive symptoms and b) depression which appears in the aftermath of acute psychotic symptoms. The emergence of postpsychotic symptoms remains unaffected by the course and outcome of depressive symptoms during the acute phase (Birchwood et al., 2000).

Pathways to Emotional Dysfunction in Psychosis

The prevalence of emotional dysfunction in psychosis even in the early stages of the illness has been extensively documented both in literature and in clinical settings. The pathogenesis of this dysfunction, however, still remains unclear, and the need to identify the developmental and psychological origins of disorders of emotion is considered of fundamental importance.

Birchwood (2003) aiming at identifying the processes which lead to the development of emotional dysfunction in psychosis, has attempted to distinguish between three overlapping pathways: a) emotional disorders that are intrinsic to psychosis, b) emotional disorders as a psychological reaction to psychosis, and c) emotional disorders arising from anomalous experiences in the developmental trajectory of individuals.

Emotional Disorders Intrinsic to Psychosis

Three correlated but independent dimensions in the symptomatology of psychosis are identified; positive symptoms, negative symptoms and depressive symptoms.

According to the "intrinsic theory" (Hirch & Jolley, 1989) depression is an essential part of schizophrenia and as such should be discernible in one or more stages during the course of an acute psychotic episode. Evidence supporting the assumption that emotional dysfunction originates from an inherent process in psychosis has shown high prevalence rates of depression in first-episode psychosis following the same course as that of positive symptoms and remitting when these symptoms subside (Birchwood et al., 2000a; Johnson, 1981; Koreen et al., 1993).

Emotional Disorders as a Psychological Reaction to Psychosis

The second pathway proposes the emergence of emotional disorders in response to psychological circumstances, for example life events over which the patient has no control, the illness itself or traumatizing experiences.

Post-psychotic depression: Findings (Birchwood et al., 1993) have associated the occurrence of depression in schizophrenia with patients' perceptions of controllability of illness (lack of control) and acceptance of the negative cultural stereotypes, whereas the appraisal of psychosis as a major life event which entails loss, humiliation and entrapment was linked to the emergence of post-psychotic depression (Iqbal et al., 2000b). Birchwood et al. (2005) examining the processes linked to the development and maintenance of post-psychotic depression in schizophrenia, have found that those patients who went on to develop PPD appraised greater loss, humiliation and entrapment arising from their psychosis, confirming previous findings. Furthermore, during PPD, patients reported *greater* insight into their illness, further lowering of self-esteem and hardening of the above appraisals and self-blame.

Social anxiety and the shame and stigma of mental illness: Social anxiety could be triggered as a psychological response to a stigmatised illness and particularly as a result of shame-related appraisals arising from mental illness. It is possible that people with psychosis being aware of the cultural stereotypes associated with their illness fear that they will be humiliated and rejected by others in the social environment (Birchwood et al., in press). In order, therefore, to avoid being shamed they withdraw and isolate themselves, giving rise to symptoms of social anxiety.

Emotional Disorders Arising from Shared Social Risk Factors

A further source of co-variation of emotion and psychosis comes from the finding that the social risk factors for psychosis (e.g., deprivation, urbanicity, ethnic density, trauma) are the same as those that are risk factors for emotional dysfunction in the (non-psychotic) population. Birth cohort (e.g., Isohanni et al., 1998) and retrospective studies (e.g., Jones et al., 1994) reveal that FEP is often preceded by social difficulty and emotional disorder as well as low level "psychotic" experiences stretching back into early adolescence (Poulton et al., 2000). These childhood antecedents of a developing psychosis will unfold in a social environment, and there is now considerable evidence that social context influences morbidity and outcome, for example urban living, including deprivation (Pederson & Mortensen, 2001; van Os et al., 2003), membership of

marginalised social groups (Bhugra, Bhamra, & Taylor, 1997; AESOP refs), the impact of migration (Bhugra, 2000) and the (favourable) correlates of "developing nation" status (Harrison et al., 2001). Childhood trauma and problems of parental attachment constitute a vulnerability factor for the development of emotional dysfunction in adulthood (Brown et al., 1990; Oakley-Brown et al., 1995). Elevated levels of sexual, physical and emotional abuse have been consistently reported in the developmental trajectory of individuals suffering from depression and social anxiety (Fombonne et al., 2001; Harrington et al., 1990; Pine et al., 1998).

The science of developmental psychopathology (Rutter & Sroufe, 2000) shows that continuity exists between early emotional functioning and later adaptation. Psychopathological disturbances emerging in adulthood (e.g., anxiety, depression, risk of suicide) are usually preceded by emotional and behavioural problems rooted in childhood and early adolescence (Fombonne et al., 2001; Hofstra et al., 2001; Rao et al., 1995). These problems develop in a dimensional and not a categorical way, and they are influenced by the social and familial context (Rutter, 2000). A strong case can be made that the variance in co-morbid emotional disorder in FEP is a product in part of these unfolding, disturbed, developmental pathways triggered by the psychosis diathesis and shared social risk factors (see Figure 1).



Figure 1.

Psychosis (A)
and
developmental
(B) pathways
to emotional
dysfunction

Social Anxiety

Anxiety disorders and particularly symptoms of social anxiety are among the most prevalent disturbances manifest in people with psychosis exerting a significant impact upon the course and outcome of the disorder (Cossof & Hafner, 1998: Tibbo, Swainson, Chue, LeMelledo, & 2003). Despite the fact that due to the use of different diagnostic criteria prevalence rates differ from study to study (Emsley, Oosthuizen, Joubert, Roberts, & Stein, 1999; Fenton & McGlashan, 1986; cited in Cossof & Hafner, 1998), the occurrence of social anxiety in the course of psychosis is elevated, affecting predominantly women and first-episode psychotic patients (Emsley et al., 1999). Recent estimates of its prevalence in individuals with mental illness range between 8.2% to 36.3% (Cassano, Pini, Saettoni, & Dell'Oso, 1999; Cossof & Hafner, 1998; Davidson, Hughes, George, & Blazer, 1993; Goodwin et al., 2003; Pallanti, Quercioli, & Hollander, 2004; Penn, Hope, Spaulding, & Kucera, 1994), depending on the sample used (inpatients vs. outpatients) and the clinical criteria. In a recent study we conducted

examining the prevalence and nature of social anxiety in psychosis, we found that 26.2% of individuals with FEP have also been identified with a diagnosis of social anxiety disorder. Taking into consideration the highly impairing nature of social phobia as well as the serious psychopathological implications entailed, it is possible that its manifestation during the course of psychosis inevitably leads to a poorer outcome of the disorder and impacts upon the ability to form relationships. The pervasiveness of social phobia in schizophrenia led Roth (1991, cited in Davidson et al., 1993) to identify the need for a careful distinction between psychosis presenting with social sensitivity and a "psychotic" social phobia, which could be regarded as a severe form of this illness. The importance of this distinction is best seen in terms of administering accurate therapeutic treatments, which in the case of comorbidity may call for the need of a separate management of the two disorders.

Depression

Although prevalence rates of depression may range greatly from study to study, all reported estimates, some varying from 22% to 75% depending on the criteria used (Koreen et al., 1993), are substantially high. Indeed, symptoms such as loss of interest or pleasure, concentration difficulties, hypersomnia/insomnia and psychomotor agitation or retardation were consistently present in the majority of psychotic patients (Wassink, Flaum, Nopoulos, & Andreasen, 1999). These symptoms were reported to occur at the height of psychosis, namely the acute phase, and to resolve as psychosis remitted. Thus, they seem to follow the same course with psychotic symptoms and more precisely with positive symptoms (i.e. hallucinations, delusions), proving that they are a common psychopathological feature of schizophrenia (House, Bostock, & Cooper, 1987; Johnson, 1981; Koreen et al., 1993). Furthermore, depressive symptoms have been reliably separated both from negative symptoms and akinesia, which are regarded as the result of neuroleptic medication (Birchwood et al., 2000; House et al., 1987; Koreen et al., 1993), challenging thus the concept of "pharmacogenic depression".

Apart from evidence indicating the presence of depression during the acute phase and remission of psychosis, depressive symptoms can also occur after the onset of psychosis, giving rise to the syndrome of postpsychotic depression (PPD). PPD is a relatively common clinical state emerging in the aftermath of acute psychotic symptoms with prevalence rates reaching up to 50% of cases examined (McGlashan & Carpenter, 1976). What it is even more surprising is the high frequency of PPD in first-episode psychotic patients (50%) as opposed to those with multiple relapses (32%), which underlines the complexity and pervasiveness of the disorder (Birchwood et al., 2000a). Attempts to describe the course pattern of PPD suggest that its onset occurs concurrently with psychosis but becomes clinically prominent only after psychotic symptoms subside (Green, Nuechterlein, Ventura, & Mintz, 1990; McGlashan & Carpenter, 1976). Thus, it seems to develop independently of positive and negative symptoms, challenging further the notion that depression in psychosis is merely a byproduct of medication (Birchwood et al., 2000a).

The presence of depressive symptoms in the course of psychosis has been among the predictive factors for actual suicide and suicide attempts. Suicidal behaviour has been prevalent both among chronic psychotic (estimated rate between 11.6% and 18%, Walsh et al., 2001) and first-episode psychotic patients (annual suicide rate 0.3%, Nordentoft et al., 2002). However, an increasing number of findings include the latter group among those at highest risk and identify the presence of depression accompanied by feelings of hopelessness as well as the occurrence of hallucinations and delusions as significant predictive factors for suicide attempt and suicidal behaviour (Nordentoft et al., 2002). Thus depression constitutes a complex cli-nical syndrome that entails serious psychopathological implications, especially when co-morbid with psychosis.

TABLE 1. PREVALENCE OF SOCIAL ANXIETY DISORDER IN PSYCHOSIS

	N	Inpatients %	Outpatients %
Cossof & Hafner (1998)	100	17%	
Cassano et al. (1999)	77	16.1%	
Goodwin et al. (2003)	184	8.2%	
Tibbo et al. (2003)	30		23.3%
Pallanti et al. (2004)	80		36.3%

Social Rank Theory Approach

Social rank theory examines psychopathology from an evolutionary adaptationist point of view. This theoretical model suggests that access to resources such as food and territories triggers the emergence of conflicts between pursuers during which some will win while others will lose (Price, 1972; cited in Gilbert & Allan, 1998). In such circumstances of defeat, it is important for losers to have an internal inhibitory mechanism, which will force them to cease competing and reduce challenging behaviour. There are two basic processes: a) *escalation* (threatenothers, keep competing, etc.) and b) *de-escalation* (back off, retreat). Deescalation comes into operation when being in a disadvantage position as it inhibits competing behaviour and promotes accommodation to the fact that one has lost (Price, 1972; cited in Gilbert & Allan, 1998). Furthermore, it sends signals of submission to the attacker so as to disengage from inflicting further harm.

Social rank theory has also been applied to human studies in an attempt to understand human behaviour under analogous circumstances; that of social comparison or conflicts in interpersonal situations. It is proposed that social life is organized in terms of hierarchies, with those in higher hierarchies being more dominant whereas those in

lower hierarchies having less power and control (Trower & Gilbert, 1989). The desired goal here is the achievement of a higher status in terms of dominance hierarchies or the maintenance of the already achieved social status. Social attractiveness plays a significant role in ensuring someone's status in the social hierarchy and moreover establishing group relationships (Gilbert, 1997). Experiences of being devalued and perceived as socially unattractive could pose a threat not only to someone's social identity, but also to the social bonds he/she has already established. In order to avoid such a possibility, individuals engage in various strategies aiming at reducing the perceived threat and its consequences. Trower and Gilbert (1989) have proposed two kinds of systems which are activated in cases of unfavourable social comparisons. The "defense system" involves behavioural strategies characterized by attempts to inhibit attacks and signal submission, attempts to renegotiate the relationship with dominant others and a state of alertness, what is called "braced readiness" in which people are alert to withdraw or send submissive signals so as to deter further attacks from the more dominant. The "safety system", on the other hand, adopts a more positive approach in social hierarchies. Specifically, others are not seen as a source of constant threat, rather as a source of safety and support. The signals sent between the members of the social group aim at inducing contact and positive reinforcement.

Social Anxiety

The evolutionary approach provides an alternative way of considering psychopathology and particularly social anxiety. Gilbert (2001) explored the presentation of various disorders in terms of the natural defense mechanisms activated under conditions of losses and threats. He suggested that psychopathology is characterized by a) sensitivity to social threats and b) activation of responses to these threats which become maladaptive only when they are prolonged, easily aroused or arrested. Social anxiety reflects a heightened sensitivity to social threats, the most prominent that of being under constant evaluation from dominant others (Trower, Sherling, Beech, Harrop, & Gilbert, 1998). The consequences of a potentially unfavourable evaluation in terms of loss of social status and rejection lead people with social anxiety to engage in submissive behaviours which are evident in displays of fearfulness, withdrawal and isolation and which are usually involuntary (Trower et al., 1998). Gilbert and Allan (1994) have further supported this finding by providing evidence of the relationship between social comparison, submissive behaviour and personality traits of neuroticism and introversion known to be related to depressive and anxiety disorders. It seems therefore that, as Trower and Gilbert (1989) suggested, social anxiety basically reflects failure to recruit the safety system and activation of the defense system which is characterized by submissive responses as means of coping against the perceived social threats.

Submissive behaviour seems to be a core feature of socially phobic individuals affecting not only their behavioural responses during a social interaction but also the cognitive schemata they hold of such an interaction. Anomalous interpersonal schemata referring to the relationship between the individual and his social environment are

characteristic of social phobia. Trower et al. (1998) reported that during a face-to-face interaction between socially anxious and non-anxious individuals, the former exhibited a rather avoidant, subordinate pattern of behaviour in which they rarely took the lead in a conversation, asked questions or participated actively in any way. On the contrary, they seemed to perceive social interaction in terms of dominance hierarchies, even when it was carried out between people of equal status, and not as a reciprocal, supportive process. The authors concluded that socially anxious people are characterized by "competitive schemata" in their everyday interactions in which they perceive themselves as low rankers and subordinate whereas others as more dominant and confident.

Understanding the psychological processes that underlie the development and maintenance of social anxiety has received great interest in the literature, mainly due to the implications in the therapeutic approaches of the disorder.

Social Anxiety in Psychosis

Social anxiety has been identified as one of the most highly co-morbid diagnoses in psychosis (Cassano et al., 1999; Cossof & Hafner, 1998; Pallanti et al., 2004). However, its pathogenesis still remains unclear and the few studies which have attempted to address in depth the nature and phenomenology of social anxiety in psychosis have often produced divergent results. A widely held notion is that social anxiety is merely a byproduct of positive symptoms and specifically is driven by the presence of paranoia and persecutory delusions (Freeman et al., 2001, 2002). In a recently conducted study of 61 first-episode psychotic individuals, we attempted to address this issue. According to our findings, 26.2% (n = 16) of the sample was diagnosed with social anxiety, consistent with previous studies. When examining the relation between social anxiety and positive symptoms, our findings appeared to contradict the notion that social anxiety in psychosis is simply an artefact of the symptomatology of the illness and particularly of paranoia. More specifically, no differences were reported between psychotic (FEP) and socially anxious psychotic (FEP/SaD) people (i) in the positive symptoms of the PANSS and (ii) in paranoid ideation as measured by the Details of Threat Questionnaire (DoT).

However, if paranoid delusions do not underlie the development of social anxiety in psychotic individuals, it remains uncertain which pathways lead to the development of social anxiety in psychosis. Research on the processes that underlie social anxiety in first-episode psychosis is limited. Few studies which have attempted to address this issue (Birchwood et al., in press; Gumley, O'Grady, Power, & Schwannauer, 2004) have reported that negative appraisals about mental illness, involving shame, feelings of inferiority and loss of social status, are very prominent among psychotic individuals with social anxiety. Shame-based concerns and their role in the development and maintenance of social anxiety in people with psychosis is considered important (Birchwood et al., in press). In our study we attempted to investigate the role of shame (shame proneness and shame about mental illness) in the development and

maintenance of social anxiety in psychosis and here we present some preliminary findings (Figure 2).



Figure 2.

Shame appraisals and social anxiety

TABLE 2. PREVALENCE OF EMOTIONAL DYSFUNCTION IN FIRST AND MULTIPLE EPISODE PSYCHOSIS (BIRCHWOOD ET AL., 2005)

	Multiple episode schizophrenia	1st episode psychosis
Post-psychotic depression	Up to 75% (40%)	22-80% (50%)
Suicidal ideation	40%	50%
Completed suicides	5-8%	6% (3 yrs of onset)
Acute psychosis	50%	52%
Social anxiety disorder	28-63%	46%
PTSD	51%	35%

As shown in Figure 2, socially anxious psychotic people are more vulnerable to experiencing shame (OAS) than those with psychosis only. The FEP/SaD group was particularly susceptible to "put-downs" and humiliation by others suggesting that proneness to shame is a trait inherently involved in social anxiety in psychosis. Socially anxious psychotic people also expressed greater shamefulness and humiliation arising from being diagnosed with a stigmatized illness (PBIQ shame).

Overall, the above findings suggest that shame plays a fundamental role in social anxiety in psychosis. It is possible, therefore, that shamefulness attached to mental illness, fear of discovery of the illness and efforts to conceal it from others contaminate social interactions leading to avoidance, withdrawal and isolation.

Depression

According to the social rank theory (Price et al., 1994) depression is seen as an adaptive response to losing rank during a process of social comparison. Festinger has supported that social comparison is an inevitable element of everyday social interaction with a twofold purpose; *self-evaluation*, where the individual seeks self-appraisals about

his/her abilities and skills and self-enhancement which refers to the individual's motivation to make positive self-evaluations. Thus, engaging in such a process seems to be crucial for the self-perception since it enables the individual to reduce uncertainty about specific aspects of the self, acquire information important for self-knowledge and even enhance himself/herself in relation to others in a social environment. However, social comparison also entails certain risks, the most prominent being that of the emergence of personal flaws, inadequacies, negative self-evaluations which may lead to social rejection and even isolation. Applying social comparison theory to depression may facilitate our understanding of the origins of the disorder. Unfavourable social comparisons entail the possibility of devaluation and thus low self-esteem which may well trigger the onset of negative self-perceptions in individuals at risk for depression or their maintenance in those already depressed. Further implications of such adverse comparisons may refer to the interactional difficulties and signs of social withdrawal and isolation evident in individuals with depression who seem to engage in such defense strategies in their attempt to avoid further damage to their self-esteem. Price et al. (1994) characterized depression as an involuntary losing strategy, which mainly arises under circumstances of adverse social competition enabling the individual to accept defeat and accommodate to being low-ranked. A typical depressive pattern of behaviour, according to social rank theory, is characterized by beliefs of having being defeated and down-ranked, which ultimately lead to subordinate behavioural responses where feelings of shame and humiliation are prevalent. The sense of worthlessness and inadequacy has been associated with the emergence of mood disorders (Tangeny, 1992, 1995) and most importantly with perceptions of being trapped (entrapment) (Brown et al., 1995). Gilbert and Allan (1998) in a study focusing on selfreported measures of entrapment and defeat, have confirmed the association between depressive symptomatology and patients' feelings of being defeated and trapped accompanied by an increased general arousal of escaping and moving forward.

The etiology and maintenance of depression in psychosis could be seen within the framework of social rank theory. Potentially depressogenic situations involve perceptions of a life event as entailing some kind of loss (e.g. an attack to selfesteem), humiliation (e.g. underestimation of someone's rank) and entrapment (e.g. when the individual feels there is no way out, no chance of escaping). Schizophrenia is a highly stigmatised disorder in many societies (Haghighat, 2001) and those who suffer from it can internalise the cultural stereotypes of mental illness and even appraise themselves as shameful and socially unattractive (Birchwood et al., 1993, 2000). In a study exploring the relationship between depression in schizophrenia and personal reactions to the illness and its long-term disabilities, Birchwood et al. (1993) found that what differentiated between depressed and non-depressed psychotic individuals was that the former were characterized by perceptions of lack of controllability over the illness and acceptance of the mental illness label. This was confirmed in a follow-up study by Rooke and Birchwood (1998) in which the authors examined the extent to which appraisals of psychosis as a life event entailing loss, humiliation and entrapment could trigger the onset of depression. Indeed, episodes of depression in schizophrenia

were found to be related to the individuals' appraisals of (i) loss of a social role or autonomy (ii) entrapment by the illness with no chances of escaping from such a diminishing situation and (iii) humiliation arising from being down-ranked and losing one's social identity (Rooke & Birchwood, 1998). Therefore, the development of depressive symptomatology could be considered as a defense mechanism, as a psychological response to life event over which the individual feels he/she has no control (Birchwood et al., 1993).

Post-Psychotic Depression (PPD)

Similar underlying mechanisms seem to account for the emergence of post-psychotic depression (Birchwood et al., 2000; Birchwood et al., 2005; Iqbal et al., 2000). The development of such symptoms was found to be related with the individuals' tendency to appraise loss, humiliation and entrapment arising from experiencing psychosis and its long-term disabilities. Moreover, they were inclined to view their future selves in lower-status roles experiencing further shame and humiliation, raising thus the issue of a conflict between the "desired self" and the "actual, probable self" in psychosis (Birchwood et al., 2000; Iqbal et al., 2000). In a recent study (Birchwood et al., 2005) of 105 patients who were followed up after an acute episode and monitored every 3 months for PPD, it was found those who went on to develop PPD (n = 39) appraised greater loss, humiliation and entrapment arising from their psychosis. It is important that insight did not differentiate the two groups when the participants were not depressed. Furthermore, during PPD, patients reported *greater* insight into their illness, further lowering of self-esteem and hardening of the above appraisals and self-blame.

Depression Linked to Auditory Hallucinations

Research shows that psychotic individuals experiencing auditory hallucinations are characterized by severe depression and high levels of distress arising/linked to the voices (Birchwood et al., 2000). Previous findings (Birchwood & Chadwick, 1997) have shown that it is voice hearers' appraisal of the power and omnipotence of voices (and their own subordination to them), which determines their response, irrespective of the content. Thus, voices perceived as powerful and malevolent were at first resisted, ultimately submitted to or appeased; "benevolent" voices on the other hand, were courted and usually complied with (Birchwood & Chadwick, 1997). In an attempt to understand what guides the patient's automatic tendency to feel subordinate to a voice and to perceive it to be a dominant-omnipotent entity, Birchwood et al. (2000) examined the interpersonal relationship the voice hearer has with his voice. They found that voice hearers who engaged in subordinate responses were inclined to perceive themselves as being of lower status and trapped while they also reported high levels of depression. Furthermore, this subordination to voices seemed to be reflected in the individual's social relationships in general since the perceived difference in rank between the patient and the voice was strongly associated with perceived social rank differences between the self and others. A number of processes have been suggested in an attempt to define the voice-self relationship and depression in psychosis (Figure 2).

First, it is possible that the depression evident in this group is primary and "drives" the linkage between hostile voice and subordinate self, i.e. the more depressed one is, the more inferior one feels to voices and others and the more distress voices will create. The second model directs causality in the psychotic illness itself and suggests that a (delusional) belief in voice power elicits a subordinate self-perception and this, in the context of more severe (e.g. frequent) hallucinations leading to depression and general distress. Therefore, the greater the frequency and loudness of the voices, the greater the resulting distress and depression.

The third model suggests that it is the individual's appraisals of status and social power in the first place that trigger beliefs about the power and omnipotence of voices which subsequently lead to symptoms of distress and depression.

Depression in Acute Schizophrenia

Birchwood et al. (2005) also examined the possibility that depression in acute schizophrenia may arise from similar psychological processes to those identified in PPD and in "voices". The authors argued that the presumed threat from persecutors to the individual's well being is sufficient to trigger depression and fear, particularly if the patient feels defenceless (i.e. without protective "safety behaviours"). Freeman et al. (2001) have looked at the relationship between patients and their persecutors and found higher depression associated with a perception that persecutors are more powerful and omnipotent and unable to defend against supposed threats. Preliminary findings showed that individuals who attributed greater power and omnipotence to persecutors and who had fewer "safety behaviours" were more depressed, suggesting that it is how one appraises the threat from persecutors that is relevant to the development of depression during the acute episode.

The models illustrated in Figure 3 were put to test by Birchwood et al. (2005), who set out to investigate the factors which maintain distress and depression attached to voice hearing. Specifically, the authors tested whether patients who perceive themselves to possess low social power and social status ("rank") also perceive themselves to be subordinated to their dom-inant voice; i.e. the patient's voice, and his social peers, will be appraised as more powerful and with higher social status than himself. Consistent with previously conducted studies, findings showed that (i) individuals who perceived themselves to have *lower* social power also perceived themselves to be more subordinated (powerless) relative to their voice, (ii) where individuals perceived themselves to be of low *social* status, this was mirrored in their relationship with their dominant voice and (iii) those who appraised the voice with higher power and status than themselves were significantly more distressed by their voices. A Covariance structural equation modelling (SEM) used to test goodness of fit with each of the above models, rejected models 1 and 2 but failed to reject model 3, which supports perceptions of social rank and power as the primary processes triggering beliefs about the power and omnipotence of voices which subsequently leads to distress and depression.



Three models of distress arising from voices

Clinical Implications

Understanding the pathways that lead to the development of emotional dysfunction in psychosis will have important implications for psychological interventions and treatments of such symptoms associated distress in psychosis. Attempts to therapeutically target symptoms of social anxiety in individuals with schizophrenia using group-based cognitive-behavioural therapy have been successful in significantly reducing social anxiety, distress, depression and general psychopathology and also increase quality of life (Halperin et al., 2000; Kingsep et al., 2003). The cognitive behavioural intervention applied so far for social anxiety in psychosis has been based on the model proposed by Clark and Wells (1995). Exposure techniques, cognitive reconstruction, relaxation training and social skills training are the major features comprising this model (Heimberg, 2002; Heimberg, Liebowitz, Hope, & Schneier, 1995). It seems therefore that a therapeutic approach for the treatment of emotional disorders in non-psychotic populations have been applied for the management of emotional dysfunction when this is comorbid with psychosis. The problem with this approach is evident as it fails to take into consideration the idiosyncratic nature and phenomenology of emotion in people with psychosis.

The importance of revising and reconstructing the current conceptual framework of cognitive-behavioural therapy in psychosis has been stressed by Birchwood and Trower (2006). The authors have suggested that the future of cognitive-behavioural therapy lies in understanding and focusing on the interplay between emotion and psychosis so as to develop effective psychological treatments which will not be primarily based on pharmacology. Emotional disorders predate the onset of psychosis, they are also prominent throughout the course of the illness and even after psychosis has subsided. Thereby, a proposed model of cognitive-behavioural therapy for emotional dysfunction in psychosis should target to reduce these symptoms and associated distress by focusing on the idiosyncratic relationship between emotion and psychosis. Cognitive behavioural therapy can be applied in order to alleviate distress or behaviour arising from the symptoms of psychosis (Trower, Birchwood, Byrne, & Meaden, 2004) or to reduce depression and anxiety at the early phase, particularly in individuals at high risk or when these develop concurrently with psychosis (Birchwood & Trower, 2006); as an early intervention strategy to prevent transition to psychosis (Morrison et al., 2004);

and in order to prevent relapse in psychosis (Gumley et al., 2003). In treatment terms, therefore, the use of the cognitive and related therapies might more profitably be focused on these emotional "comorbidities" than on the psychosis symptoms themselves (Birchwood & Trower, 2006). This, we believe, is the challenge that lies ahead.

Maria Michail

Department of Primary Care and General Pratice

School of Medicine

University of Birmingham, B15 2TT

United Kingdom

Email: m.michail@bham.ac.uk

MARIA MICHAIL

Dr. Maria Michail is a Research Associate in the Department of Primary Care and General Practice of the University of Birmingham. She completed her post-graduate research training in 2006. Her thesis titled "Anomalous Interpersonal Schemata among First-Episode Psychotic People with Comorbid Social Anxiety" explores the pathways that underlie the development of social anxiety in people with first-episode psychosis investigating at the same time developmental vulnerabilities and attachment issues. Her research interests cover the areas of emotional dysfunction in early psychosis; early detection of psychosis in primary care; developmental vulnerability and attachment.

Key publications

Birchwood, M., Gleeson, J., Chanen, A., McCutcheon, L., Francey, S., & Michail, M. (In press). *Emotional and personality dysfunction in early psychosis* (Chapter 16). Cambridge University Press

Michail, M., & Birchwood, M. (2004). Anomalous interpersonal schemata among first-episode psychotic people with co-morbid social anxiety. *PsyPag Quarterly*, Issue 51 Michail, M., & Birchwood, M (2006). Anomalous interpersonal schemata among people with first-episode psychosis and co-morbid social anxiety. *Schizophrenia Research*, *16*, Sup. 1, S105.

MAX BIRCHWOOD

Prof. Max Birchwood is Director of the Birmingham Early Intervention Service and Professor of Clinical Psychology at the University of Birmingham. He has undertaken theoretical and trial based research into the application of cognitive behavioural therapy to psychosis, including auditory hallucinations, acute psychosis and relapse prevention.

MAX BIRCHWOOD

Key publications

Birchwood, M., Gilbert, P., Gilbert, J., et al. (2004). Interpersonal and role-related schema influence the relationship with the dominant voice in schizophrenia: a comparison of three models. *Psychological Medicine*, *34*, 1571-1580.

Birchwood, M., Iqbal, Z., & Upthegrove, R. (2005). Psychological pathways to depression in schizophrenia: studies in acute psychosis, post psychotic depression and auditory hallucinations. *European Archives of Psychiatry and Clinical Neuroscience*, *255*, 202-212.

Birchwood, M., & Trower, P. (2006). The future of cognitive therapy for psychosis: not a quasi-neuroleptic. *British Journal of Psychiatry*, *188*, 107-108.

Trower, P., Birchwood, M., & Meaden, A., et al. (2004). Cognitive therapy for command hallucinations: randomised controlled trial. *British Journal of Psychiatry*, *184*, 189-198.

Teksten sto på trykk første gang i Tidsskrift for Norsk psykologforening, Vol 44, nummer 5, 2007, side 537-547

TEKST

Maria Michail Max Birchwood



References

Beer, M. D. (1996a). The dichotomies: psychosis/neurosis and functional /organic: A historic perspective. History of Psychiatry, vii, 231-255.

Beer, M. D. (1996b). Psychosis: A history of the concept. Comprehensive Psychiatry, 37 (4), 273-291.

Bhugra, D. (2000). Migration and schizophrenia. Acta Psychiatrica Scandinavica. Supplementum, 102, 68-73.

Bhugra, D. Bhamra, J., & Taylor, P. (1997). Users views of a drop-in project for the homeless. International Journal of Social Psychiatry, 43, 95–103.

Birchwood, M. (2003). Editorial: Pathways to emotional dysfunction in psychosis. British Journal of Psychiatry, 182, 373–375.

Birchwood, M., & Chadwick, P. (1997). The omnipotence of voices: Testing the validity of a cognitive model. Psychological Medicine, 27, 1345-1353.

Birchwood, M., Gilbert, P., Gilbert, J., Trower, P., Hay, J., Murray, E., & Miles, J. (2004). Interpersonal and role-related schema influence the relationship with the dominant "voice" in schizophrenia. A comparison of three models. Psychological Medicine, 34, 1571–1580.

Birchwood, M., Iqbal, Z., Chadwick, P., & Trower, P. (2000). Cognitive approach to depression and suicidal thinking in psychosis I. Ontogeny of post-psychotic depression. British Journal of Psychiatry, 177, 516–521.

Birchwood, M., Iqbal, Z., Upthegrove, R., & Gilbert, P. (2005). Psychological pathways to depression in schizophrenia: Studies in acute psychosis, post-psychotic depression and auditory hallucinations. European Archives of Psychiatry and Clinical Neuroscience,

- Birchwood, M., Mason, R., MacMillan, F., & Healy, J. (1993). Depression, demoralization and control over psychotic illness: A comparison of depressed and non-depressed patients with a chronic psychosis. Psychological Medicine, 23, 387–395.
- Birchwood, M., Meaden, A., Trower, P., Gilbert, P., & Plaistow, J. (2000). The power and omnipotence of voices: Subordination and entrapment by voices and significant others. Psychological Medicine, 30, 337-344.
- Birchwood, M., & Trower, P. (2006). The future of cognitive-behavioural therapy for psychosis: not a quasi-neuroleptic. British Journal of Psychiatry, 188, 107-108.
- Birchwood, M., Trower, P., Brunet, K., Gilbert, P., Iqbal, Z., & Jackson, C. (in press). Social anxiety and the shame of psychosis: A study in first-episode psychosis.
- Brown, G. W., Andrews, B., Bifulco, A., & Veiel, H. (1990). Self-esteem and depression. 1: Measurement issues and prediction of onset. Social Psychiatry and Psychiatric Epidemiology, 25, 200–209.
- Brown, G. W., Harris, T. D., & Hepworth, C. (1995). Loss, humiliation and entrapment among women developing depression: A patient and non-patient comparison. Psychological Medicine, 25, 7-21.
- Cassano, G. B., Pini, S., Saettoni, M., & Dell'Oso, L. (1999). Multiple anxiety disorder comorbidity in patients with mood spectrum disorders with psychotic features. American Journal of Psychiatry, 26, 517–525.
- Clark, D. M, & Wells, A. (1995). A cognitive model of social phobia. In R. G., Heimberg, M. Liebowitz, D. Hope, & F. Scheier (Eds.), Social phobia: Diagnosis, assessment and treatment (pp. 69-93). New York: Guilford Press.
- Cossof, J., & Hafner, R. (1998). The prevalence of comorbid anxiety in schizophrenia, schizoaffective disorder and bipolar disorder. Australian and New Zealand Journal of Psychiatry, 32, 67-72.
- Davidson, J., Hughes, D., George, L., & Blazer, D. (1993). The epidemiology of social phobia: Findings from the Duke Epidemiological Catchment Area Study. Psychological Medicine, 23, 709-718.
- Emsley, R., Oosthuizen, P., Joubert, A., Roberts, M., & Stein, D. J. (1999). Depressive and anxiety symptoms in patients with schizophrenia and schizophreniform disorder. Journal of Clinical Psychiatry, 60, 747-751.
- Fearon, P., Kirkbride, J., Morgan, C., Dazzan, P., Morgan, K., Lloyd, T., Hutchinson, G., Tarrant, J., Fung, A. W., Holloway, J., Mallett, R., Harrison, H., Leff, J., Jones, P., & Murray, R. (2006). Incidence of schizophrenia and other psychoses in ethnic minority groups: Results from MRC AESOP study. Psychological Medicine, 36, 1541–1550.
- Freeman, D., & Garety, P. (2003). Connecting neurosis and psychosis: The direct influence of emotion on delusions and hallucinations. Behaviour Research and Therapy, 41, 923-947.
- Freeman, D., Garety, P. A., & Kuipers, E. (2001). Persecutory delusions: Developing the understanding of belief maintenance and emotional distress. Psychological Medicine, 31, 1293-1306.
- Fombonne, E., Wostear, G., Cooper, V. Harrington, R., & Rutter, M. (2001). The Maudsley long-term follow-up of child and adolescent depression. 1. Psychiatric outcomes in adulthood. British Journal of Psychiatry, 179, 210–217.
- Gilbert, P. (1997). The evolution of social attractiveness and its role in shame, humiliation and guilt and therapy. British Journal of Medical Psychology, 70, 113-147.
- Gilbert, P. (2001). Evolutionary approaches to psychopathology: The role of natural defenses. Australian and New Zealand Journal of Psychiatry, 35 (1), 17-27
- Gilbert, P., & Allan, S. (1994). Assertiveness, submissive behaviour and social comparison. British Journal of Psychology, 33, 295–306.

- Gilbert, P., & Allan, S. (1998). The role of defeat and entrapment (arrested flight) in depression: An exploration of an evolutionary view. Psychological Medicine, 28, 585-598.
- Goodwin, D. R., Amador, F. X., Malaspina, D., Yale, A. S., Goetz, R. R., & Gorman, M. J. (2003). Anxiety and substance use comorbidity among inpatients with Schizophrenia. Schizophrenia Research, 61, 89-95.
- Green, M., Nuechterlein, K., Ventura, J., & Mintz, J. (1990). The temporal relationship between depressive and psychotic symptoms in recent-onset schizophrenia. American Journal of Psychology, 147, 179-182.
- Gumley, A., O'Grady, M., McNay, L., Reilly, Power L., & Norrie, J. (2003). Early intervention for relapse in schizophrenia: Results of a 12-month randomized controlled trial of cognitive-behavioural therapy. Psychological Medicine, 33, 419–431.
- Gumley, A., O'Grady, M., Power, K., & Schwannauer, M. (2004). Negative beliefs about self and illness: A comparison of individuals with psychosis with and without comorbid social anxiety disorder. Australian and New Zealand Journal of Psychiatry, 38, 960-964.
- Hafner, H., Loffler, W., Mauer, K., Hambrecht, M., & an der Heiden W. (1999). Depression, negative symptoms, social stagnation and social decline in the early course of schizophrenia. Acta Psychiatrica Scandinavica, 100, 105-118.
- Hafner, H., Mauer, K., Trendler, G., an der Heiden, W., Schmidt, M., & Konnecke, R. (2005). Schizophrenia and depression: Challenging the paradigm of two separate diseases A controlled study of schizophrenia, depression and healthy controls. Schizophrenia Research, 77, 11-24.
- Haghighat, R. (2001). A unitary theory of stigmatization-pursuit of self-interest and routes to destigmatization. British Journal of Psychiatry, 178, 207-215.
- Halperin, S., Nathan, P., Drummond, P., & Castle, D. (2000). A cognitive-behavioural, group-based intervention for social anxiety in schizophrenia. Australian and New Zealand Journal of Psychiatry, 34, 809-813.
- Harrington, R. (2001). Developmental continuities and discontinuities. British Journal of Psychiatry, 179, 189-190.
- Harrington, R., Fudge, H., Rutter, M., Pickles, A., & Hill, J. (1990). Adult outcomes of childhood and adolescent depression—I. psychiatric status. Archives of General Psychiatry, 47, 465-473.
- Harrison, G., Hopper, K., Craig, T., Laska, E., Siegel, C., Wanderling, J., Dube, K. C., Ganev, K., Giel, R., Holmberg, S., Janka, A., Lee, P., Leon, C., Malhotra, S., Marsella, A., Nakane, Y., Sartorius, N., Shen Y., Skoda, S., Thara, R., Tsirkin, S., Varma, V., Walsh, D., & Wiersma, P. (2001). Recovery from psychotic illness: A 15 and 25 year international follow-up study. British Journal of Psychiatry, 178, 506-517.
- Heimberg, R. G. (2002). Cognitive-behavioral therapy for social anxiety disorder: Current status and future directions. Biological Psychiatry, 51, 101-108.
- Heimberg, R., Liebowitz, M., Hope, D. A., & Schneier, F. R. (Eds). (1995). Social phobia: Diagnosis, assessment and treatment. New York: Guilford Press.
- Hirsch, S. R., & Jolley, A. G. (1989). The dysphoric syndrome in schizophrenia and its implications for relapse. British Journal of Psychiatry, 155 (supplement 5), 46-50.
- Hofstra, M., Ende, J., & Verhulst, F. (2001). Adolescents' self-reported problems as predictors of psychopathology in adulthood: 10-year follow-up study. British Journal of Psychiatry, 179, 203-209.
- House, A., Bostock, J., & Cooper, J. (1987). Depressive symptoms in the year following onset of a first schizophrenic illness. British Journal of Psychiatry; 151, 773-779.
- Isohani, I., Jarvelin, M. R., Nieminen, P. et al. (1998). School performance as a predictor of psychiatric hospitalisation in adult life. A 28 year follow-up in the Northern Finland 1966 Birth Cohort. Psychological Medicine, 28, 967-974.
- Iqbal, Z., Birchwood, M., Chadwick, P., & Trower, P. (2000). Cognitive approach to depression and suicidal thinking II. Testing the validity of a social ranking model. British Journal of Psychiatry, 177,

- Johnson, W. (1981). Studies of depressive symptoms in schizophrenia I. The prevalence of depression and its possible causes. British Journal of Psychology, 139, 89-101.
- Johnstone, C. E., Ebmeier, P. K., Miller, P., Owens, G. C. D., & Lawrie M. S. (2005). Predicting schizophrenia: Findings from the Edinburgh High-Risk Study. British Journal of Psychiatry, 186, 18-25.
- Jones, P., Rodgers, B., Murray, R., & Marmot, M. (1994). Child development risk factors for adult schizophrenia in the British 1946 birth cohort. Lancet, 344, 1398-1402.
- Kingsep, P., Nathan, P., & Castle, D. (2003). Cognitive-behavioural group treatment for social anxiety in schizophrenia. Schizophrenia Research, 63, 121–129.
- Koreen, A., Siris, S., Chakos, M., Alvir, J., Mayerhoff, D., & Lieberman, J. (1993). Depression in first-episode schizophrenia. American Journal of Psychology, 150, 1643-1648.
- Liddle, P. F., Barnes, T. R. E., Curson, D. A., et al. (1993). Depression and the experience of psychological deficits in schizophrenia. Acta Psychiatrica Scandinavica, 88, 243–247.
- McGlashan, T., & Carpenter, W. (1976). An investigation of the postpsychotic depressive symptom. American Journal of Psychology, 133, 14-19.
- McGorry, D. P., Bell, C. R., Dungeon, C. P., & Jackson, J. H. (1998). The dimensional structure of first-episode psychosis: An exploratory factor analysis. Psychological Medicine, 28, 935–947.
- Miller, P., Byrne, M., Hodges, A., Lawrie, M. S., Owens, G. C. D., & Johnstone, C. E. (2002). Schizotypal components in people at high-risk of developing schizophrenia: Early findings from the Edinburgh High-Risk Study. British Journal of Psychiatry, 180, 179–184.
- Morrison, A. P., French, P., Walford, L. et al. (2004). Cognitive therapy for the prevention of psychosis in people at ultra-high risk: randomised controlled trial. British Journal of Psychiatry, 185, 291-297
- Nordentoft, M., Jeppesen, P., Abel, M., Kassow, P., Petersen, L., Thorup, A., Krarup, G., Hemmingsen, R., & Jorgensen, P. (2002). OPUS Study: Suicidal thinking, suicidal ideation and hopelessness among patients with first-episode psychosis. British Journal of Psychiatry, 181 (suppl. 43), S98-S106.
- Oakley-Brown, A., Joyce, P., Wells, J., Bushnell, J., & Hornblow, A. (1995). Adverse parenting and other childhood experiences as risk factors for depression in women aged 18-44 years. Journal of Affective Disorders, 34, 13-23.
- Pallanti, S., Quercioli, L., & Hollander, E. (2004). Social anxiety in outpatients with schizophrenia. A relevant cause of disability. American Journal of Psychiatry, 161, 53-58.
- Pederson, C. B., & Mortensen, P. B. (2001). Evidence of a dose-response relationship between urbanicity during upbringing and schizophrenia risk. Archives of General Psychatry, 58, 1039-1046.
- Penn, L. D., Hope, A. D., Spaulding, W., & Kucera, J. (1994). Social anxiety in schizophrenia. Schizophrenia Research, 11, 277–284.
- Pine, D., Cohen, P., Gurley, D., Brook, J., & Ma, Y. (1998). The risk for early-adulthood anxiety and depressive disorders in adolescents with anxiety and depressive disorders. Archives of General Psychiatry, 55, 56-64.
- Poulton, R., Caspi, A., Moffitt, T. E. et al. (2000). Children's self-reported psychotic symptoms and adult schizophreniform disorder A 15 year longitudinal study. Archives of General Psychiatry, 57, 1053-1058.
- Price, J., Sloman, L., Gardner, R., Gilbert, P., & Rohde, P. (1994). The social hypothesis of depression. British Journal of Psychiatry, 164, 309-315.
- Rao, U., Ryan, N., Birmaher, B., Dahl, R., Williamson, D., Kaufman, J., Rao, R., & Nelson, B. (1995). Unipolar depression in adolescence: Clinical course in adulthood. Journal of American Academy of Child and Adolescent Psychiatry, 34, 566-578.

- Rooke, O., & Birchwood, M. (1998). Loss, humiliation and entrapment as appraisals of schizophrenic illness: A prospective study of depressed and non-depressed patients. British Journal of Clinical Psychology, 37, 259–268.
- Rutter, M., & Sroufe, L. A. (2000). Developmental psychopathology: Concepts and challenges. Development and Psychopathology, 12, 265–296.
- Schlenker, B. R., & Leary, M. R. (1982). Social anxiety and self-presentation: A conceptualization and model. Psychological Review, 92, 641–669.
- Tangney, J., & Fischer, K. (Eds). (1995). Self-conscious emotions. The psychology of shame, guilt, embarrassment and pride. New York: Guilford Press.
- Tangney, J., Wagner, & Gramzow (1992). Proneness to shame, guilt and psychopathology. Journal of Abnormal Psychology, 101, 469-478.
- Tibbo, P., Swainson, J., Chue, P., & LeMelledo, J.-M. (2003). Prevalence and relationship to delusions and hallucinations of anxiety disorders in schizophrenia. Depression & Anxiety, 17, 65-72.
- Trower, P., Birchwood, M., & Meaden, A. (2004). Cognitive therapy for command hallucinations: randomised controlled trial. British Journal of Psychiatry, 184, 312-320
- Trower, P., & Gilbert, P. (1989). New theoretical conceptions of social anxiety and social phobia. Clinical Psychology Review, 9, 19-35.
- Trower, P., Sherling, G., Beech, G., Harrop, C., & Gilbert, P. (1998). The socially anxious perspective in face-to-face interaction: An experimental comparison. Clinical Psychology and Psychotherapy, 5, 155–166.
- van Os, J., Hanssen, M., Bak, M. R. V., & Vollebergh, W. (2003). Do urbanicity and familial liability coparticipate in causing psychosis? American Journal of Psychiatry, 160, 477-482.
- Walsh, E., Harvey, K., White, I., Higgitt, A., Fraser, J., & Murray, R. (2001). Suicidal thinking in psychosis: Prevalence and predictors from a randomised controlled trial of case management. British Journal of Psychiatry, 178, 255–260.
- Wassink, T., Flaum, M., Nopoulos, P., & Andreasen, N. (1999). Prevalence of depressive symptoms early in the course of schizophrenia. American Journal of Psychiatry, 156, 315–316.
- Yung, R. A., & McGorry, D. P. (1996). The prodromal phase of first-episode psychosis: Past and current conceptualizations. Schizophrenia Bulletin, 22, 353-370.