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# The social context of insight in schizophrenia

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**Abstract** *Background*: Psychiatrists place great weight on impaired insight in schizophrenia, generally attributing it to pathological mental processes. However, denial of illness may be based on attitudes common in patients' social and cultural groups. Moreover, even where denial of illness has a pathological element, it may be affected by the social context. In this paper, we predicted that denial of illness would be associated with social distance between clinician and patient, and reduced by access to 'normalizing' social interaction. *Method*: One hundred and fifty patients with schizophrenia in the London arm of the European Schizophrenia cohort were assessed using the 'Awareness of Illness' (AI) subscale of David's Assessment of Insight. Clinical and social attributes were related to AI. *Results*: There was little evidence for our social distance hypotheses: there was little variation in AI by social class, ethnicity, membership of a drug taking culture or the presence of strongly held religious beliefs. However, there were strong relations between AI and the size of primary group, consistent with our normalizing hypothesis. *Conclusions*: The normalizing function of social support is in line with modern psychological models of delusion formation. Longitudinal data will eventually be available from the current study that will assist in establishing the causal direction of this association.

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## Introduction

Like delusions, impaired insight is a set of unaccepted beliefs. However, while the unacceptability of delusional ideas is measured against what it would be reasonable for the general public to believe, insight is judged in relation to the beliefs of clinical experts. Thus, at one level, judgements of impaired insight made by clinicians might merely reflect a disagreement between their clinical formulation of their clients' problems and the clients' non-medical interpretation. Such disagreements have been studied extensively in physical medicine.

However, it is usually argued that impaired insight in psychiatric practice represents more than disagreement between clinician and client. This is because impaired insight is most salient in those who are diagnosed as suffering from psychotic disorders, in particular schizophrenia. Indeed, the International Pilot Study of Schizophrenia found that impaired insight was the commonest symptom of schizophrenia (World Health Organization 1973). This special place of lack of insight among the clinical features of schizophrenia has been replicated (Amador et al. 1994), but has not yet been fully explained.

Clearly, the designation of lack of insight as a symptom implies that it reflects processes that go beyond mere disagreement over the correct way to describe the client's experiences. These processes are likely to be complex, just as the processes underlying the formation of delusions appear to be (Garety and Hemsley 1994; Jorgensen 1995).

In the last 10 years or so, attempts have been made to define and expand the concept of insight and the way it is measured (McEvoy 1989; Amador et al. 1993; David 1990). The last-named author, who has been particularly influential, has described it as consisting of three separate but overlapping dimensions: treatment compliance, awareness of illness, and the ability to re-label psychotic experiences correctly.

The problem with most clinical judgements of impaired insight in the individual case is that they conflate the adherence to different models (the disagreement account of lack of insight) with the abnormal processes in the client's thinking that may underpin this disagreement (the process or symptom account): they do not apportion the contribution of these two elements, and as a result judgements may merely be based on the first.

Perhaps the term itself contributes to this lack of precision. First, it contains within it an immediate value judgement: insight is either full/good or lacking/poor, with the implication that the latter is always inferior or undesirable (Derrida 1972). Secondly, it suggests that it is an object of academic or professional knowledge, qualitatively different from mere illness beliefs. This gives it the character of a symptom, and locates it as a problem within the individual (Foucault 1997). Thirdly, and relating to point two, the word itself implies 'inner vision' without reference to any social context. In other words, it conceals the extent to which self-beliefs emerge refracted through the appraisals of others, and derive ultimately from a shared store of cultural representations (cf. Kirmayer and Corrin 1998).

Whatever its imperfections, insight defined in this way has predictive validity, being associated with clinical variables: medication compliance (Bartko et al. 1988), treatment outcome (McEvoy et al. 1989), and risk of suicide (Amador et al. 1996). It also continues to be used in clinical practice, for example being mentioned on 60% of a sample of forms as a reason for compulsory admission in London (White and Sandor 2000). We are therefore left with the riddle of why many people with schizophrenia deny being ill or needing treatment.

Most research has attempted to link poor insight either with psychopathology or with cognitive function (e.g. Cuesta and Peralta 1994; Lysaker and Bell 1994; Kemp et al. 1996). This line of enquiry assumes the symptom status of lack of insight, i.e. as predating or accompanying the illness process and *adding* to the disability resulting from it.

A second group of research studies has explored the possibility that poor insight is a *response* to the illness process: a coping mechanism of sorts, and one that serves to preserve self-esteem and *minimise* disability (McGlashan et al. 1979; Warner et al. 1989; Birchwood et al. 1993; Mechanic et al. 1994). This line of theorising depends in part on stigma theory. Whilst the findings in this latter group of studies have been fairly consistent, they have, unfortunately, tended not to use recognised measures of insight.

Given the degree to which illness can be regarded as a social construction (Parsons 1951), and cultural variations in the expression of distress (Littlewood 1990), it is surprising that no research has been directed specifically at the social context of poor insight, and particularly of denial of illness. Under both the disagreement model and the process model, one would expect the ideas associated with poor insight to be related in some way to social variables such as the availability of, and beliefs of, others. Johnson and Orrell (1995) have called this 'the missing social dimension', and it offers an important line of enquiry.

If insight does have a social dimension, it should be affected by the nature and degree of the patients' social interactions. This is a significant unexplored area of research: we therefore predicted that there is a relationship between insight and social support, and that it varies according to cultural representations of madness. People who deny they are ill are often difficult to care for, and sometimes difficult to relate to in other ways as well. Lysaker et al. (1998) have suggested that there are three mechanisms whereby lack of insight may prevent people establishing and sustaining social relationships: because of dissonant illness beliefs; because of poor empathy with others (given that poor insight may reflect failure to appreciate how one is seen by others); and because of distorted sensitivity to finer social nuance (given that poor insight may be associated with cognitive deficits).

In this paper, we have examined the social correlates of impaired insight in a sample of people with schizophrenia from the Islington arm of the European Schizophrenia cohort. Our principal aim was to identify social factors that might contribute to its causation. Our study will eventually provide longitudinal data to test our hypotheses further. The current report is based on cross-sectional data from the first interview.

We made three basic predictions. The first was that insight would be more impaired, the greater the social distance between the client and the clinician. This was assessed using variables like social class and ethnicity. The second was that insight would be greater in clients with more access to normalising social experience, that is, in those with a larger social network or with family-based living arrangements. The third was that insight would be less in illicit drug users and in those with strongly held religious beliefs. This is because both groups have access to belief systems capable of providing alternative formulations for their psychotic experiences.

## Subjects and methods

Our sample of 150 people was randomly selected from a specially constructed register of people living in the London Borough of Islington, a socially deprived area of inner London. The register was compiled from subjects aged between the ages of 18 and 64, who had been in contact with secondary psychiatric services during the previous 5 years with a diagnosis of schizophrenia or a related condition (F 20–29 ICD-10). They are part of a multi-centre European longitudinal study (the European Schizophrenia Cohort), in the course of which they will be interviewed five times over 2 years. This study reports data collected at the first interview.

Our subjects were initially contacted by post. This was followed up by phone calls, if necessary via relevant clinicians and next-of-kin. If we were still unable to make contact, we attempted to visit them at their recorded address, leaving a second letter for them if they were not at home. In this way, we made personal contact with 70% of the selected sample. A few subjects then refused to be interviewed, the final response rate being just under 65%.

Each interview lasted between 1 and 2 h. During this time, a number of instruments were administered by two trained interviewers, who also collected basic social and demographic data. Schedules for Clinical Assessment in Neuropsychiatry (SCAN; World Health Organisation 1992) was used to elicit symptoms and confirm the diagnosis of schizophrenia under DSM-IV criteria. The data thus obtained were then used to score Positive and Negative Syndromes in Schizophrenia (PANSS; Kay 1991) and the Calgary Depression Scale for Schizophrenia (CDSS; Addington et al. 1992).

The 74-item version of the Lehman Quality of Life Scale (QoLI; Lehman 1988; Lançon et al. 2000) was also administered. This instrument includes objective and subjective ('satisfaction') measures of social and occupational functioning in eight domains, such as housing and finance. Two subsections of Lehman's instrument derived from social support questionnaires were of special interest to us. They provide both an estimate of social activity through a measure of frequency of social contacts, and a measure of the individual's satisfaction with those contacts. In addition, we asked our subjects to give a figure for the number of friends and family they felt close to, as a shorthand way of eliciting information about the size of their primary group (Henderson 1980). Relevant items were taken from the Interview Measure of Social Relationships (IMSR; Brugha et al. 1987) for this purpose. We noted especially where people described having close friends *and* family members, since diffuse social domains have been shown to be important in a number of illnesses (e.g. Brown and Harris 1978; Brugha 1995; Buchanan 1995; Salokangas 1997). We also used observer-rated uni-dimensional measures of social adjustment: the Global Assessment of Functioning (GAF), and the Global Assessment of Relational Functioning (GARF) (American Psychiatric Association 1994).

We collected information on social class, ethnicity and country of birth, religious affiliation, and drug use. Religious affiliation was categorised by the raters as follows: no religious or spiritual beliefs, strongly held beliefs but with no associated behaviours, and beliefs with associated behaviours (attending churches, mosques etc., reading the bible, Koran etc., praying etc.).

The measurement of insight was problematic. Surprisingly, of the existing instruments, none is readily applicable to a community sample without modification. The instruments mentioned above include items such as 'attitude to hospitalisation' (McEvoy 1989; Markova and Berrios 1992) or items to be completed by nursing staff (David 1990), which were largely redundant or unworkable for our sample. For the purposes of this paper, we therefore decided to concentrate on the 'Awareness of Illness' dimension of David's Schedule (David 1990), and adapt the other scales for our purposes (to be reported later).

The Awareness of Illness (AI) subscale has three questions:

1. 'Do you have an illness, or something wrong with you?'
2. 'Is it a psychiatric or a mental illness?'
3. 'How do you explain it?'

The person's responses to each question are recorded on a three-point scale, and can be summed to give a total AI score ranging from 0–6. This score formed the dependent variable in the analyses that follow, including analysis of covariance.

## Results

The study was designed to obtain an epidemiological sample of people with schizophrenia in the area, in order to avoid the tendency to select from the more severe end of the spectrum. Accordingly, only 12% were current inpatients. Nevertheless, the respondents had experienced a mean of five previous admissions, and a mean duration of illness approaching 15 years.

The sociodemographic characteristics of the sample are given in Table 1. Patients came from a wide age range, and there was the expected over-representation of males. There were substantial numbers from ethnic minorities, and parental social class indicated some working class excess. Few patients were employed and 41% lived alone.

**Table 1** Sample characteristics

| | | |
|---|---|---|
| Sex | | |
| Male | 91 | 60.7% |
| Female | 59 | 39.3% |
| Mean age (range) | 41 (19–64) | |
| Parental social class | | |
| I | 13 | 11.3% |
| II | 10 | 8.7% |
| III | 27 | 23.5% |
| IV | 32 | 27.8% |
| V | 33 | 28.7% |
| Employment status | | |
| Unemployed | 128 | 85.3% |
| Employed | 22 | 14.7% |
| Ethnicity | | |
| White | 94 | 62.7% |
| Afro-Caribbean | 27 | 18.0% |
| African | 15 | 10.0% |
| Asian | 14 | 9.3% |
| Living arrangements | | |
| Parental family | 27 | 18.0% |
| Own family | 25 | 16.7% |
| Group accommodation | 37 | 24.7% |
| Alone | 61 | 40.7% |
| Mean no. of admissions (range) | 4.9 (0–30) | |
| Duration of illness (range) | 14.4 yrs (1–42) | |
| Current status | | |
| Inpatient | 19 | 12.7% |
| Outpatient | 131 | 87.3% |
| Illicit drugs in last year | | |
| Use | 30 | 20% |
| No use | 120 | 80% |

### Clinical correlates of awareness of illness

Scores on David's AI subscale were highly correlated with current symptoms measured using the PANSS (Table 2). At the stage of univariate analysis, there was no apparent association of AI with depressive symptoms (assessed by the CDSS). However, an important positive correlation between the AI subtotal and depressive symptoms emerged ($r = 0.29^{***}$) when current positive psychotic symptoms were partialled out. This correlation was similar for each of the three constituent questions.

Being an inpatient was associated with a significantly lower AI score, as was living in group accommodation (Table 2). However, this was probably due to the level of current symptoms, as when the PANSS total score was controlled for, the association ceased to be significant. The same was true of the GAF and the GARF scores. A weak association of AI with number of admissions ($P = 0.03$) and number of admissions under sections of the Mental Health Act ($P = 0.06$) was apparent after 'time since diagnosis' was partialled out. However, these associations disappeared again when the analysis was extended to include the PANSS total score.

**Table 2** Clinical associations of David's Awareness of Illness (AI) subscale (*CDSS* Calgary Depression Scale for Schizophrenia, *GAF* General Assessment of Functioning, GARF Global Assessment of Relational Functioning)

| | Do you have an illness? | Is it a psychiatric illness? | How do you explain it? | (AI) |
|---|---|---|---|---|
| *Zero order correlation*[a] | | | | |
| Positive symptoms[b] | −0.19* | −0.25** | −0.33*** | −0.39*** |
| Negative symptoms[b] | −0.07 | −0.05 | −0.37*** | −0.23** |
| General symptoms | −0.27** | −0.15* | −0.36*** | −0.37** |
| CDSS | 0.08 | 0.15* | 0.15* | 0.16* |
| GAF | 0.15 | 0.16* | 0.39*** | 0.31*** |
| GARF | 0.21** | 0.09 | 0.21** | 0.24** |
| Time since diagnosis | 0.04 | 0.09 | −0.11 | 0.08 |
| No. of admissions | −0.03 | −0.06 | −0.17 | 0.01 |
| No. of sections | −0.08 | 0.2* | −0.16* | −0.15 |
| *Comparison of means (ANOVA)* | | | | |
| Current place of treatment (means) | | | | |
| Community | 1.48** | 1.23* | 1.25** | 3.99*** |
| Hospital | 1.05** | 0.84* | 0.74** | 2.63*** |
| Living arrangements | | | | |
| Parental family | 1.67 | 1.29 | 1.13*** | 4.08** |
| Own family | 1.68 | 1.68 | 1.55*** | 4.91** |
| Collective accommodation | 1.31 | 1.00 | 0.83*** | 3.14** |
| Alone | 1.38 | 1.18 | 1.34*** | 3.90** |

*$P < 0.05$; **$P < 0.01$; ***$P < 0.001$

[a] Spearmans rho reported for three component questions; Pearson's correlation coefficient for overall AI score

[b] On the Positive and Negative Symptoms in Schizophrenia (PANSS)

## Awareness of Illness and social distance

In line with our social distance prediction there was a trend for those from higher parental occupational class to have a higher AI score (Table 3). However, this apparent initial association disappeared when these variables were subjected to multivariate analysis controlling for current symptoms. No association was apparent for level of education.

In the univariate analysis, ethnicity was not significantly associated with insight, whereas being born outside Britain was. Both associations became stronger when the current PANSS score was entered as a covariate in the ANCOVA. Thus, the adjusted means for the AI subtotal by ethnicity became: White 4.2, African-Caribbean 3.5, African 3.1, Asian 3.8 ($P = 0.03$).

**Table 3** AI (mean scores) and social distance

| | Do you have an illness? | Is it a psychiatric illness? | How do you explain it? | (AI) |
|---|---|---|---|---|
| Level of education completed | | | | |
| Primary | 1.57 | 1.35 | 1.35 | 4.26 |
| Secondary | 1.47 | 1.24 | 1.09 | 3.80 |
| Tertiary | 1.40 | 1.37 | 1.43 | 4.00 |
| Parental social class | | | | |
| I | 1.79 | 1.71* | 1.71 | 5.21** |
| II | 2.00 | 1.56* | 1.44 | 5.00** |
| III | 1.67 | 1.56* | 1.28 | 4.50** |
| IV | 1.38 | 1.04* | 1.12 | 3.53** |
| V | 1.64 | 1.05* | 1.18 | 4.32** |
| Place of birth | | | | |
| Britain and Ireland | 1.52 | 1.31* | 1.31** | 4.14 |
| Elsewhere | 1.32 | 1.05* | 0.98** | 3.34 |
| Ethnicity | | | | |
| White | 1.54 | 1.33 | 1.26 | 4.14 |
| Black-Carribean | 1.35 | 1.00 | 1.19 | 3.54 |
| Black-African | 1.13 | 0.93 | 0.93 | 3.00 |
| Asian | 1.50 | 1.29 | 1.21 | 4.00 |
| Illicit drug use in last year | | | | |
| Use | 1.47 | 1.31* | 1.24 | 4.02 |
| No use | 1.38 | 0.97* | 1.14 | 3.48 |
| Religious affiliation (means) | | | | |
| No beliefs | 1.51** | 1.35** | 1.31 | 4.16* |
| Beliefs, no behaviour | 1.10** | 0.76** | 1.10 | 2.97* |
| Beliefs and behaviour | 1.64** | 1.38** | 1.19 | 4.21 |

*$P < 0.05$; **$P < 0.01$; ***$P < 0.001$; all analyses: comparison of means (ANOVA)

## Insight and exposure to alternative belief systems

Those currently using illicit drugs reported having significantly more close friends, but also more positive symptoms. Nevertheless, it is possible that social support counteracts the effect of positive symptoms, as drug users did not differ in terms of AI from non-users (Table 3). When symptoms (PANSS) were combined with a number of close friends in a general factorial ANCOVA, current use of illicit drugs started to approach significance as a predictor of poor insight ($P = 0.10$), with the adjusted means as follows: no use of illicit drugs: 4.0, use of illicit drugs: 3.5.

In the univariate analysis, religious affiliation was a significant predictor of AI score ($P = 0.009$). Post hoc tests (Bonferroni) suggested that there was actually no statistical difference between those with *no* professed religious beliefs (mean 4.1), and those who practised their religion (mean 4.3). This group, ostensibly the most religious, apparently held their spiritual beliefs *alongside* conventional illness understandings. It was the intermediate group, i.e. those who professed to having religious beliefs but who had *no* associated behaviours (religious practices), whose scores were lowest (mean 2.8). This finding was also statistically significant for all three of the component questions. It became even more significant ($P = 0.003$) when combined with current symptoms (PANSS) in the ANCOVA. It also remained significant when combined with social support and ethnicity, suggesting it was not confounded by these variables.

### Insight and the extent and quality of social networks

Relative to the normal population (cf. Brugha 1993), our sample had smaller numbers of close friends and family overall (Table 4). Higher AI scores were associated with having more close friends and larger primary groups (the sum of close friends and close family). However, AI was negatively correlated with *satisfaction* with the individuals' non-family contacts, and this remained highly significant when current symptomatology (PANSS and CDSS) had been partialled out. When David's AI subtotal was dichotomised, those scoring 4 and over had a mean primary group size of 6.09, and those scoring 3 and under, 3.90 ($P = 0.003$). These figures were close to Brugha's figures for acute depression, and long-term disorder, respectively.

The association of AI with the quantity and quality of *family* contacts was not as strong ($P = 0.1$), although there was a trend that followed the same pattern: those with greater AI having greater contact with their families, but being less satisfied with that contact.

This association with social network attributes persisted, even after controlling for current symptoms (PANSS), inpatient status, hospital admissions and age. The strongest association of AI with objective measures of social support was with having *both* close friends and close family members.

## Discussion

Our sample was predominantly community based, and many of the subjects were symptom free. This raises the issue, not as yet debated in the literature, of how best to describe and measure insight in such a sample. For the purposes of our study, those who felt they had recovered, and were justified in thinking this (inasmuch as they were no longer advised to take medication or they had been discharged from psychiatric care), were scored as insightful if they accepted they had had a mental illness in the past. They were very few in number ($n = 5$), and so would not have influenced the variance in the overall scores a great deal. The questions were asked of this small group retrospectively, i.e. considering now how they were when they were last unwell.

There has been an over-reliance on inpatient samples in the study of insight, perhaps unfortunately, as it is very likely that the mere fact of being in hospital affects illness beliefs independently of other variables. The effect may be to exaggerate people's views, with any confrontation leading to excessive illness denial, especially in those who feel coerced, or who resent being in hospital.

The need for more community-based studies of insight is therefore clear, particularly as it is in this setting that the consequences of poor insight (non-compliance, relapse, self-harm) are likely to be played out. A new questionnaire may be necessary – one that specifically addresses the issues of a community-based population and, for example, places more emphasis on insight as a function of help-seeking behaviour.

As well as having to consider the case of those in remission, there are other methodological difficulties in attempting to study insight in a community sample. In particular, sample attrition may occur precisely because of patients' attitudes towards professionals, disagreements over diagnosis, and so on. (We attempted to reduce attrition by offering a small financial incentive.)

**Table 4** AI and social networks

| | Do you have an illness? | Is it a psychiatric illness? | How do you explain it? | (AI) |
|---|---|---|---|---|
| *Zero order correlation*[a] | | | | |
| Frequency of contact with family | 0.15* | −0.08 | −0.06 | 0.14* |
| Frequency of contact with friends | 0.05 | 0.10 | 0.27** | 0.19* |
| Satisfaction with contact with family | −0.04 | −0.08 | −0.16* | −0.11 |
| Satisfaction with contact with friends | −0.05 | −0.19* | −0.24** | −0.27** |
| Number of close family members | 0.13* | 0.11 | 0.10 | 0.08 |
| Number of close friends | 0.14* | 0.16* | 0.31*** | 0.21** |
| Primary group size | 0.16* | 0.20* | 0.20* | 0.22** |
| Whether close to family and friends | 0.17* | 0.18* | 0.22** | 0.28** |

*$P < 0.05$; **$P < 0.01$; ***$P < 0.001$

[a] Spearmans rho reported for three component questions, Pearsons correlation coefficient for overall AI score

The correlation with other psychopathological characteristics, especially positive symptoms, is in accordance with expectations. Other studies have also shown this (e.g. Amador et al. 1993, 1994; Lysaker et al. 1998; Sanz et al. 1998), albeit not all (McEvoy 1989; David et al. 1992, 1995; Lysaker and Bell 1994; Peresta and Cualta 1994). The fact that this second group of studies did not show such an association may have been due to a failure to distinguish symptom types, or a reliance on samples with a narrow range of psychopathology.

The *extent* of the positive association of AI with depressive symptoms was unexpected. However, our findings replicate those of Sanz et al. (1998), who found the same discrepant relationship of insight with depressive and positive symptoms, as measured using the Brief Psychiatric Rating scale (BPRS). Mechanic et al. (1994) and Warner et al. (1989) have found a similar association, and produced evidence for its being mediated by the effect of stigma on self-esteem. This supports the theory of poor insight as a defence mechanism, protecting from depression and low self-esteem, whereby using illness attributions becomes a *cause* of depression. However, the cross-sectional nature of the studies that found an association of depression with insight has not permitted the true direction of causality to be established. The opposite direction of effect is equally possible: being depressed may increase the chance of rating oneself as ill, simply because, for most people, 'being ill' is equated with 'feeling bad'.

The relative constancy of insight across levels of social class was striking, once clinical variables were controlled for. We did find some ethnic differences in our insight measures, most pronounced in people actually born abroad (ours is the first paper to report such a finding). Thus it is possible that the ethnic differences only operate through the associated cultural differences, maximised in those born abroad. The ethnic difference, such as it was, was mainly accounted for by the component 'How do you explain your illness?'. It may therefore only be a reflection of language difficulties. We were surprised to find that the question 'Do you have an illness?' showed no evidence of cross-cultural variation. Johnson and Orrell (1996) found in a case note study that insight was related to ethnicity, as did White and Sandor (2000) in a study of Mental Health Act forms. However, the small degree of statistical significance overall, and the fact that ethnic differences have not shown up in other, more comparable, papers (e.g. David et al. 1995), suggests this variable may not be that important a predictor of insight when measured using standardised instruments.

Our predictions of the effect of clinician-client social distance were thus not strongly supported. It is important to note that this does not mean that such factors do not become more important in the day-to-day reality of clinical practice (cf. Johnson and Orrell 1995; White and Sandor 2000).

One deduction from labelling theory (Scheff 1966, 1975) is that acceding to illness attributions ('accepting the label') should be accompanied by social rejection; however, this was not so. On the contrary, as we predicted on the basis that social interaction is normalising, it was those with poor insight who were most isolated, and this was true even allowing for current symptom levels. This confirmed the findings of Lysaker et al. (1998). These authors postulated that poor insight might be a cause of social isolation, but, again, the opposite is equally plausible: that the emergence of insight is facilitated by having intact social networks, which may serve to compensate for faulty reality testing.

However, subjects with good insight were *less satisfied* with the relationships they had. This may be because they have more requirements or expectations of support, or, less likely in our view, because the quality of the relationships was genuinely worse. We should be able to resolve this question during the second phase of our study.

It is surprising, given the extensive research on social support, that this normalizing function of support has not been explicitly tested or described, but it is alluded to in the literature (e.g. Breier and Strauss 1984), and may explain the improvement in insight shown by a sample of people who completed a rehabilitation programme (Lysaker and Bell 1995). Such a theory does presuppose, however, that the support network in question endorses conventional medical models of illness.

Those in our sample with 'intermediate' religious affiliation were consistently less likely to endorse conventional illness beliefs. Because this group did not apparently have distinct clinical or social characteristics, the finding may correspond to their having a particular attitudinal disposition, or world view. For example, they might be antipathetic to what they perceive as materialistic (medical) explanations of their experiences, and have found other explanations personal to them (Corrin 1990). Even though religious affiliation is difficult to define and measure in a way that does justice to all people regardless of background and culture (King et al. 1995), our findings are at least sufficient to suggest that more work could usefully be done in this area.

We also found that belonging to a drug-using subculture did not lead to reduced insight, despite the general apprehension that people with dual diagnoses tend to reject treatment (Bebbington 1995). Together, these findings suggest that psychosis is seen as illness to a degree that largely transcends social and cultural boundaries.

The results of our study should be seen in the context of current psychological theories of psychotic processes. These rely heavily on the subjects' interpretation of anomalous experience, an externalising attributional style, and an attentional bias in favour of subjects' conceptualization of their experience (Garety and Freeman 1999). The social context of these processes is almost certainly of great importance, with social isolation providing a facilitative environment for the development and maintenance of delusional ideas (Garety et al. 2000). Impaired insight shares attributes with delusional thinking, but also represents a 'meta-cognition' that summarises subjects' experiences and beliefs. Our findings concerning the relationship between good insight and relatively maintained social networks must be seen in this context.

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## References

Addington D, Addington J, Maticka-Tyndale E, Joyce J (1992) Reliability and validity of a depression rating scale for schizophrenia. Schizoph Res 6: 201–208

Amador XF, Strauss DH, Yale SA, Flaum MM, Endicott J, Gorman JM (1993) Assessment of insight in psychosis. Am J Psychiatry 150: 873–879

Amador XF, Flaum M, Andreasen NC, Strauss DH, Yale SA, Clark SC, Gorman JM (1994) Awareness of illness in schizophrenia and schizoaffective and mood disorders. Arch Gen Psychiatry 51: 826–836

Amador XF, Friedman JH, Kasapis C, Yale SA, Flaum M, Gorman JM (1996) Suicidal behavior in schizophrenia and its relationship to awareness of illness. Am J Psychiatry 153: 1185–1188

American Psychiatric Association (1994) Diagnostic and Statistical Manual of Mental Disorders, 4th edn. Washington, DC: American Psychiatric Association

Bartko G, Herczeg I, Zador G (1988) Clinical symptomatology and drug compliance in schizophrenic patients. Acta Psychiatr Scand 77: 74–76

Bebbington PE (1995) The content and context of compliance. Int Clin Psychopharmacol [9 Suppl] 5: 41–50

Birchwood M, Mason R, McMillan F (1993) Depression, demoralisation and control over psychotic illness: a comparison of depressed and non-depressed patients with a chronic psychosis. Psychol Med 23: 387–395

Breier A, Strauss JS (1984) The role of social relationships in the recovery from psychotic disorders. Am J Psychiatry 141: 949–955

Brown GW, Harris T (1978) Social origins of depression: a study of psychiatric disorders in women. Tavistock, London

Brugha T (1993) Social support networks. In: Leff JP, Brugha D (eds) Principles of social psychiatry. Blackwell, London, pp 502–516

Brugha T (1995) Social support and psychiatric disorder: overview of evidence. In: Brugha TS (ed) Social support and psychiatric disorder: research findings and guidelines for clinical practice. Cambridge University Press, Cambridge, pp 1–40

Brugha T, Sturt E, MacCarthy B, Potter J, Wykes T, Bebbington PE (1987) The Interview Measure of Social Relationships: the description and evaluation of a survey instrument for assessing personal social relationships. Soc Psychiatry 22: 123–128

Buchanan J (1995) Social support and schizophrenia: a review of the literature. Arch Psychiatr Nurs 9: 68–76

Corrin E (1990) Facts and meaning in psychiatry: an anthropological approach to the lifeworld of schizophrenics. Cul Med Psychiatry 14: 153–188

Cuesta MJ, Peralta V (1994) Lack of insight in schizophrenia. Schizophr Bull 20: 359–365

David AS (1990) Insight and psychosis. Br J Psychiatry 156: 798–808

David A, Buchanan A, Reed A, Almeida O (1992) The assessment of insight in psychosis Br J Psychiatry 161: 599–602

David A, Van Os J, Jones P, Harvey I, Foerster A, Fahy T (1995) Insight and psychotic illness. Br J Psychiatry 167: 621–628

Derrida J (1972) Trans. Barbara Johnson. Dissemination. Athlone Press, London

Foucault M (1997) Trans. Sheridan Smith. The archeology of knowledge. Routledge, London

Garety PA, Hemsley DR (1994) Delusions: investigations into the psychology of delusional reasoning. Oxford University Press, Oxford

Garety P, Kuipers E, Fowler D, Freeman D, Bebbington P (2000) A cognitive model of the positive symptoms of psychosis. Submitted to Psychol Med

Garety PA, Freeman D (1999) Cognitive approaches to delusions: a critical review of theories and evidence. Br J Clin Psychol 38: 113–154

Henderson S (1980) Personal networks and the schizophrenias. Aust NZ J Psychiatry 14: 255–259

Johnson S, Orrell M (1995) Insight and psychosis: a social perspective. Psychol Med 25: 515–520

Johnson S, Orrell M (1996) Insight, psychosis and ethnicity. A casenote study. Psychol Med 26: 1081–1084

Jorgensen P (1995) Recovery and insight in schizophrenia. Acta Psychiatr Scand 92: 436–440

Kay RS (1991) Positive and Negative Syndromes in Schizophrenia: assessment and research. Brunner/Mazel, New York

Kemp R, Hayward P, Applewhaite G, Everitt B, David A (1996) Compliance therapy in psychotic patients: randomised controlled trial. BMJ 312: 345–349

King M, Speck P, Thomas A (1995) The Royal Free Interview for Religious and Spiritual Beliefs: development and standardisation. Psychol Med 25: 1125–1134

Kirmayer L, Corrin E (1998) In: Amador XF, David A (eds) Insight and psychosis. Oxford University Press, Oxford

Lançon C, Auquier P, Toumi M, Launois R, Lorqua P-M, Lehman A, Bebbington PE (2000) Validation of the brief Quality of Life Interview (QoLI). I. Internal structure. Submitted to Psychiatry Res

Lehman AF (1988) A Quality of Life Interview for the chronically mentally ill. Eval Progr Plann 11: 51–62

Littlewood R (1990) From categories to contexts: a decade of the 'New Cross-cultural Psychiatry'. Br J Psychiatry 156: 308–327

Lysaker P, Bell M (1994) Insight and cognitive impairment in schizophrenia. J Nerv Ment Dis 182: 656–660

Lysaker P, Bell M (1995) Work rehabilitation and improvements in insight in schizophrenia. J Nerv Ment Dis 183: 103–107

Lysaker P, Bell M, Bryson GJ, Kaplan E (1998) Insight and interpersonal function in schizophrenia. J Nerv Ment Dis 186: 432–436

Markova IS, Berrios GE (1992) The assessment of insight in clinical psychiatry: a new scale. Acta Psychiatr Scand 86: 159–164

McEvoy JP, Freter S, Everett G (1989) Insight and the clinical outcome of schizophrenic patients. J Nerv Ment Dis 177: 48–51

McGlashan TH, Levy ST, Carpenter WT (1979) Integration and sealing over: clinically distinct recovery styles from schizophrenia. Arch Gen Psychiatry 32: 1269–1272

Mechanic D, McAlpine D, Rosenfield S, Davis D (1994) Effects of illness attribution and depression on the quality of life among persons with serious mental illness Soc Sci Med 39: 155–164

Parsons T (1951) The social system. Routledge and Kegan Paul, London

Salokangas RK (1997) Living situation, social network and outcome in schizophrenia: a five-year prospective follow-up study. Acta Psychiatr Scand 96: 459–468

Sanz M, Constable G, Lopez-Ibor I, Kemp R, David AS (1998) A comparative study of insight scales and their relationship to psychopathological and clinical variables. Psychol Med 28: 437–446

Scheff TJ (1966) Being mentally ill: a sociological theory. Aldine, Chicago

Scheff TJ (1975) Schizophrenia as ideology. In: Schiff TJ (ed) Labelling madness. Prentice-Hall, Englewood Cliffs

Warner R, Taylor D, Powers M, Hyman J (1989) Acceptance of the mental illness label by psychotic patients: effects on functioning. Am J Orthopsychiatry 59: 398–409

White R, Sandor A (2000) Insight and compulsory admission. Submitted to Psychiatr Bull

World Health Organisation (1973) The international pilot study of schizophrenia, vol 1. WHO, Geneva

World Health Organisation (1992) SCAN Schedules for Clinical Assessment in Neuropsychiatry. WHO, Geneva