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UNAWARENESS OF ILLNESS AND ITS RELATIONSHIP WITH DEPRESSION AND SELF-DECEPTION IN SCHIZOPHRENIA

Orla Moore, Eugene Cassidy, Alan Carr & Eadhbhart O'Callaghan

INTRODUCTION

The presence of poor insight in people with schizophrenia was first identified by Bleuler and this observation has been replicated both clinically and experimentally by many subsequent investigators. (David, 1990; Greenfeld et. al. 1989; McGlashan et. al. 1975; Wciorka, 1988). Poor insight in schizophrenia is not a unitary construct (Amador et. al., 1991). For example distinctions may be made between retrospective and current insight. Distinctions may also be made between insight into various signs and symptoms; benefits of treatment; and psychosocial consequences of schizophrenia. Amador et al. (1991) have developed a semistructured interview and scale to assess these various aspects of insight. The value of their instrument, the Scale for the Assessment of Unawareness of Mental Disorder, is that standardized eliciting stimuli and response coding criteria are provided.

While there is a consensus within the field about the co-occurrence of poor insight and schizophrenia, there is considerable controversy over the theoretical relationship between the two constructs. It has been argued, on the one hand, that poor insight reflects the use of a psychological defense mechanism and on the other that it is symptomatic of a cognitive deficit (David, 1990). The principal question addressed in the current study was whether the lack of insight shown by some people with a diagnosis of schizophrenia represents a psychological defense mechanism employed to deal with adverse consequences of accepting that one suffers from this debilitating psychological disorder.

The reason for the defense is presumed to be the avoidance of depression arising from the recognition of multiple losses associated with accepting that one

has schizophrenia. A growing body of evidence supports the view that a significant subgroup of people with schizophrenia develop postpsychotic mood disorders (Siris, 1991).

Beginning with Mayer-Gross' (1960) seminal work in the area, denial is the defense mechanism that has most commonly been suggested as underpinning poor insight. In their review of the literature on postpsychotic depression, McGlashan and Carpenter (1976) conclude that these types of mood disorders arise from a lessening of defensive denial, which results in the patients becoming aware of the tragic circumstances of their illness. The finding that poor insight is positively correlated with elated mood and grandiosity has also been interpreted as evidence that poor insight serves a defensive function (Bartko et al., 1988, Heinrichs et al., 1985).

However, these ideas are not specific to schizophrenia. There is a substantial amount of research suggesting that certain illusions, or distorted views of reality, may be adaptive for mental health and well-being in the normal population (Taylor & Brown, 1988). Research in social, clinical and developmental psychology document that normal individuals possess unrealistically positive views of themselves, an exaggerated belief in their ability to control their environment and an overly positive view of the future. Furthermore, individuals who are moderately depressed or who have low self-esteem consistently display an absence of such self-enhancing illusions, (Taylor & Brown, 1988). The self-awareness deficits evident in schizophrenia may result from overuse of normally adaptive cognitive biases whereas individuals with mood disorders may fail to make use of such protective mechanisms. Indeed Sackeim (1983) has proposed that self-deception or denial is adaptive and essential to the regulation of mood states.

In the present study it was hypothesised that individuals with a diagnosis of schizophrenia who were characterized by a low level of insight would show greater defensive self-deception and less depressive symptomatology. In contrast, it was expected that individuals with a high level of insight would show lower levels of defensive self-deception and a greater degree of depressive symptomatology.

METHOD

Participants

Forty-six individuals with a DSM IV diagnosis of schizophrenia who were patients at St. John of God's Hospital, Stillorgan Co. Dublin participated in the study. Diagnoses were made by three consultant psychiatrists in routine clinical interviews in the six months preceding the study. All individuals had been informed of their diagnosis and were on anti-psychotic medication. The study was approved by the ethics committee of the hospital and all participants gave informed consent. Demographic characteristics of participants are given in Table 7.1. Participants were predominantly single males from social class 6 with an average age of 35 years and an average age of onset for their condition of 21 years. The majority having been hospitalised more than ten times. Most were living in an urban area. Just over half of the participants had a family history of schizophrenia and most were a middle child. The most prevalent diagnostic subtype was paranoid schizophrenia. The majority of the participants had no comorbid axis 1 diagnosis for a mood disorder.

Instruments

The measures used to evaluate participants were the Scales for the Assessment of Positive and Negative Symptoms (Andreason, 1983); the Scale to Assess Unawareness of Mental Disorder, (Amador et al., 1991), the Beck Depression Inventory, (Beck, Steer, & Garbin, 1988), the Calgary Depression Scale, (Addington et al., 1990) and the Balanced Inventory of Desirable Responding (Paulhus, 1994).

Table 7.1. Demographic Characteristics of 46 Participants.

Variable	Categories	Sample Statistics	Population Statistics
Gender	Male	70%	
	Female	30%	
Age	Mean	35.37 years	
	SD	8.36 years	
	Range	18-55 years	
Birth order	First born	15%	
	Middle born	50%	
	Last born	13%	
	Only child	13%	
Marital status	Single	50%	
	Married	10%	
	Separated	40%	
Location of home	Urban	85%	
	Rural	15%	
SES at time of interview	Class 1. Higher professional, farmer 200 acres	00%	9.9%
	Class 2. Lower professional 100-199 acres	04%	14.1%
	Class 3. Non-manual, farmer 50-99 acres	02%	15.5%
	Class 4. Skilled manual, farmer 30-49 acres	02%	22.8%
	Class 5. Semi-skilled, farmer 30 acres	02%	15.4%
	Class 6. Unskilled	89%	10.2%
SES at first presentation with schizophrenia	Class 1. Higher professional, farmer 200 acres	11%	9.9%
	Class 2. Lower professional 100-199 acres	13%	14.1%
	Class 3. Non-manual, farmer 50-99 acres	04%	15.5%
	Class 4. Skilled manual, farmer 30-49 acres	35%	22.8%
	Class 5. Semi-skilled, farmer 30 acres	00%	15.4%
	Class 6. Unskilled	37%	10.2%
Family history of schizophrenia		46%	
Age of onset of schizophrenia	Mean	21.41 years	
	SD	4.86 years	
	Range	16-37 years	
Number of hospital admissions	More than 10 times	37%	
	5-10 times	24%	
	0-5 times	11%	
Schizophrenia subtype	Paranoid	77%	
	Disorganised	20%	
	Catatonic	00%	
	Undifferentiated	03%	
Co-morbid axis 1 diagnosis for depr		7.0%	

Note. Percentages of the national population falling into each of 6 social class groups and urban and rural regions based on the 1986 Irish census (CSO, 1989). *Census 86*. Summary Report-2nd Series. Dublin: CSO.

Scale for the Assessment of Positive and Negative symptoms (SAPS & SANS, Andreasen, 1983). These scales were designed to measure the positive negative symptoms in schizophrenia. The scale for assessing positive symptoms contains items for rating 30 symptoms of schizophrenia, including four global symptoms

(hallucinations, delusions, positive formal thought disorder and bizarre behaviour). Each of these 4 global symptoms was rated on a 5 point scale and these were summed to yield a score from 0-20, where higher scores indicate greater severity. The negative symptom scale contains items for rating 30 symptoms, including five global symptoms (alogia, affective flattening, avolition-apathy, anhedonia-asociality and attentional impairment). Each of these 5 global symptoms was rated on a 5 point scale and these were summed to yield a score from 0-25, where higher scores indicate greater severity. In the current study a psychiatric registrar (E.C.) familiar with the history and behaviour of participants carried out the assessment of positive and negative symptoms by conducting a clinical interview and making ratings. All ratings were made before any assessment of insight or depression began and therefore the rater was blind to patients' status on these variables.

The Scale to Assess unawareness of Mental Disorder (SUMD, Amador et al., 1993). The SUMD yields scores on 10 dimensions of insight into illness. Five are concerned with insight into present illness and five with insight into past episodes. The five areas in which insight is assessed are (1) having a mental disorder; (2) the need for treatment; (3) the consequences of the psychological disorder; (4) specific signs and symptoms of the disorder and (5) attributions for symptoms. Specific symptom items on the Scale to Assess Unawareness of Mental Disorder were rated only when patients had a score of 3 (i.e. moderate) or higher on the corresponding symptom item on the SAPS and SANS.

The Calgary Depression Scale for Schizophrenia (CDS, Addington et al., 1990, 1992). The CDS is a rating scale with a structured interview designed to assess levels of depression in people with schizophrenia. Based on responses to questions asked by the interviewer, the patient is assigned a score ranging from zero to three on each of nine symptoms of depression. These are depressed mood, sense of hopelessness, self-depreciation, guilty ideas of reference, pathological guilt, heightened depression in the morning in the morning, early wakening, suicide and an interviewer assessment of depression based on the entire interview. Ratings are based on behaviour and experiences in the preceding two weeks. The CDS was derived from the Present State Examination and the

Hamilton Depression Rating Scale. The scale is designed to reflect the presence of depression exclusive of other dimensions of psychopathology in schizophrenia at both the acute and residual stages of the disorder and is sensitive to change.

The Beck Depression Inventory (BDI, Beck, Steer, & Garbin, 1988). This self-report instrument consists of 21 items designed to assess the cognitive, affective, behavioural and somatic aspects of depression. Each item contains a cluster of sentences describing depressive symptoms that increase in severity through the range of choices. These sentences are rated zero to three in terms of intensity. The BDI yields a single score reflecting severity of depression.

Balanced Inventory of Desirable Responding (BIDR, Paulhus, 1994) This 40 item instrument yields scores for self-deceptive positivity (the tendency to give self-reports that are honest but positively biased) and impression management (deliberate positive self-presentation to an audience). On the BIDR, respondents rate 40 items on 7 point likert scales. For scoring, responses on these scales are dichotomized. Hence, scores on self-deceptive positivity and impression management can range from 0 to 20. A series of studies with nonclinical populations show the instrument has adequate reliability and validity.

Procedures

All participants gave written informed consent. The scales for assessing positive and negative symptoms were administered first by a psychiatric registrar (E.C.). Within 7 days the remaining scales for assessing insight, depression and self-deception were administered by a psychologist (O.M.).

RESULTS

All 46 participants were administered the SUMD, the CDS and the BDI. Five participants were not available for the administration of the SAPS and SANS and as a result the section of the SUMD assessing insight into the positive and negative symptoms of schizophrenia were not administered to these participants.

Twelve participants did not complete the BIDR. They found the items unsuitable to their circumstances. The instruments were all scored by hand and entered into a data file where they were verified and analysed using SPSS for Apple Macintosh. Descriptive statistics for the sample on all variables assessing insight, depression, positive and negative symptoms and self-deception are presented in Table 7.2.

Table 7.2. Descriptive statistics of all cases on all variables assessing insight, depression, positive symptoms, negative symptoms and self-deception.

Variable	N	Mean	SD	Median	Actual Range	Possible Range
Symptoms						
SAPS Positive symptoms	41	8.12	5.19	8.00	20	0-20
SANS Negative symptoms	41	10.93	4.59	12	19	0-25
Insight into present state						
SUMD Current insight into mental disorder	46	2.37	1.50	2.00	4.00	0-5
SUMD Current insight into medication	46	2.26	1.57	2.00	5.00	0-5
SUMD Current insight into social consequences	46	2.57	1.57	2.00	4.00	0-5
SUMD Current insight into symptoms	41	3.15	1.52	3.00	5.00	0-5
SUMD Current attribution of symptoms	41	1.95	1.54	2.00	5.00	0-5
Insight into past state						
SUMD Past insight into mental disorder	46	2.37	1.73	1.50	5.00	0-5
SUMD Past insight into medication	46	2.54	1.75	3.00	5.00	0-5
SUMD Past insight into social consequences	46	2.44	1.69	2.00	5.00	0-5
SUMD Past insight into symptoms	41	2.65	1.64	3.00	5.00	0-5
SUMD Past attribution of symptoms	41	1.70	1.60	1.00	5.00	0-5
Depression						
BDI Depression	46	15.80	12.41	13	42	0-63
CDS Depression	46	.87	.96	1.00	3.00	0-3
CDS Hopelessness	46	.94	.98	1.00	3.00	0-3
CDS Self Depreciation	46	.80	1.05	0.00	3.00	0-3
CDS Guilty Ideas of Reference	46	0.91	1.01	1.00	3.00	0-3
CDS Pathological Guilt	46	0.89	1.02	1.00	3.00	0-3
CDS Morning Depression	46	0.52	0.72	0.00	3.00	0-3
CDS Early Wakening	46	0.54	0.81	0.00	3.00	0-3
CDS Suicide	46	0.59	0.88	0.00	3.00	0-3
CDS Observed Depression	46	0.54	0.69	0.00	2.00	0-3
Self-Deception						
BIDR Self-deceptive enhancement	34	5.24	3.29	4.00	13	0-20
BIDR Impression management	34	5.24	3.29	4.00	13	0-20

Note. SUMD= Scale to Assess Unawareness of Mental Disorder, 1=high insight, 5=no insight. BDI= Beck Depression Inventory. CDS= Calgary Depression Scale. SAPS and SANS= Scale for the Assessment of Positive symptoms and Scale for Assessment of Negative Symptoms respectively. Higher scores indicate more severe symptomatology on BDI, CDS, SAPS and SANS. BIDR=Balanced Inventory of Desirable Responding. Higher scores indicate greater self-deception or impression management.

Three sets of analyses were conducted. First, univariate correlations were computed between all indices of insight, depression and self-deception to identify specific relationships between each index of insight and indices of depression and self-deception. Second, multiple regression analyses were computed to

determine which constellation of insight variables best predicted each index of depression and self-deception. These two preliminary analyses allowed those aspects of insight most closely related to depression and self-deception to be identified. These indices of insight were then combined into a single insight variable and cases were classified as having high or low insight on the basis of their score on this composite insight variable. Groups with high and low insight were then compared on all indices of depression and self-deception. This third and final set of analyses allowed an explicit test of the hypothesis about self-deception and depression levels in cases with high and low levels of insight.

Correlational analyses

Pearson correlations were computed between ten indices of insight, ten indices of depression and two indices of self-deception. To avoid type one error, only correlations significant at $p < .01$ were selected for interpretation. These are presented in Table 7.3.

Table 7.3. Results of correlational analysis identifying those aspects of insight which relate significantly to aspects of depression and self-deception.

		Current insight into mental disorder (SUMD)	Current insight into social consequences (SUMD)	Current insight into symptoms (SUMD)	Past insight into mental disorder (SUMD)	Past Insight into social consequences (SUMD)	Past Insight into medication (SUMD)	
Depression	BDI Depression CDS	-.45	-.48	-.42				
	Morning depression CDS	-.45	-.46					
	Suicide CDS	-.42	-.420					
	Observed depression CDS	-.44	-.47	-.54				
	Pathological guilt CDS						-.40	
	Depression CDS	-.45	-.42					
	Self-deception	BIDR Impression management				.47	.52	

Note. SUMD= Scale to Assess Unawareness of Mental Disorder, 1=high insight, 5=no insight. BDI= Beck Depression Inventory. CDS= Calgary Depression Scale. SAPS and SANS= Scale for the Assessment of Positive symptoms and Scale for Assessment of Negative Symptoms respectively. Higher scores indicate more severe symptomatology on BDI, CDS, SAPS

and SANS. BIDR=Balanced Inventory of Desirable Responding. The higher the scores the higher the levels of self-deception or impression management. All correlations are significant at $p < .01$.

Current insight into the presence of a mental disorder was negatively correlated with five indices of depression: BDI depression; CDS morning depression, CDS suicide, CDS observed depression and CDS depression. Current insight into social consequences of a mental disorder was also correlated negatively with the same five indices of depression. Current insight into symptoms correlated negatively with two of the depression indices: BDI depression and CDS depression. Past insight into medication correlated negatively with CDS pathological guilt. Because low scores on SUMD reflect high insight, all of these negative correlations indicate that the presence of insight was associated with the occurrence of depressive symptomatology. Two of the insight variables (past insight into mental disorder and past insight into social consequences of a mental disorder) correlated positively with one of the self-deception indices (impression management). Since a high score on the SUMD subscales represents poor insight and a high score in BIDR represents high self-deception, these results show that poor insight is associated with self-deception.

Multiple regression analyses

To identify which constellation of insight variables predicted each of the indices of depression and self-deception, a series of 12 multiple regression analyses were conducted. In each of these analyses, the ten insight variables were entered as predictors. The results are presented in Table 7.4. Significant predictors were identified for 8 of the 10 indices of depressive symptomatology and for both indices of self-deception. Current insight into social consequences of a mental disorder was identified as a significant predictor in four of ten analyses accounting for between 12% and 17% of the variance on the following variables, BDI depression, CDS depression, CDS morning depression and CDS suicide. Current insight into symptoms was identified as a significant predictor in two of the analyses accounting for 27% of variance in CDS observed depression and 12% variance in self-deceptive enhancement. Past attribution of symptoms and current attribution of symptoms to a mental disorder were identified as significant predictors accounting for 23% of variance on the variable CDS guilty

ideas of reference. Past insight into effects of medication was identified as a significant predictor accounting for 13% of variance on the variable CDS pathological guilt.

Table 7.4. Results of multiple regression analyses identifying those aspects of insight which predict depressive symptomatology and self-deception.

Dependent variable	No. of steps	Insight variables (SUMD)	Adjusted R2	df	F	p
Depression						
BDI Depression	1	Current insight into social consequences	0.17	1,38	9.07	.005
CDS Depression	1	Current insight into social consequences	0.14	1,38	7.50	.009
CDS Guilty Ideas of reference	2	Past attribution of symptoms Current attribution of symptoms	0.23	2,37	6.72	.003
CDS Pathological guilt	1	Past insight into effects of medication	0.13	1,38	6.61	.01
CDS Morning depression	1	Current insight into social consequences	.015	1,38	7.89	.008
CDS Early wakening	1	Past insight into symptoms	0.12	1,38	6.49	.02
CDS Suicide	1	Current insight into social consequences,	0.12	1,29	5.24	.03
CDS Observed depression	1	Current insight into symptoms	0.27	1,38	15.70	.0003
Self-Deception						
BIDR Self-deceptive enhancement	1	Current insight into symptoms	0.12	1,29	5.24	.03
BIDR Impression management	1	Past insight into social consequences	0.31	1,29	14.60	.0006

Note. SUMD= Scale to Assess Unawareness of Mental Disorder, 1=high insight, 5=no insight. BDI= Beck Depression Inventory. CDS= Calgary Depression Scale. SAPS and SANS= Scale for the Assessment of Positive symptoms and Scale for Assessment of Negative Symptoms respectively. Higher scores indicate more severe symptomatology on BDI, CDS, SAPS and SANS. BIDR=Balanced Inventory of Desirable Responding and higher scores indicate greater self-deception or impression management. No significant predictors were identified for CDS hopelessness and self-deprecation.

Past insight into symptoms was identified as a significant predictor accounting for 12% of variance on the variable CDS early wakening. Past insight into social consequences accounted for 31% of the variance for the variable BIDR impression management. It was recognised that two of the assumptions of multiple regression were violated in these analyses. These were the ratio of independent variables to number of cases (which should be 1:10) and multicollinearity. However, since this was only an exploratory analysis rather

than a hypothesis testing analysis, it was decided to proceed with these analyses despite the violation of assumptions (Hair, Anderson Tatham & Black, 1992).

Comparison of groups with high and low insight

From the results of the correlational analyses and the multiple regression analyses, four subscales of SUMD were identified as being particularly strongly related to depressive symptomatology and self-deception. These were, current insight into a mental disorder, current insight into the social consequences of having a mental disorder, past insight into a mental disorder and past insight into the social consequences of having a mental disorder.

Table 7.5. Comparison of cases having high and low past and present insight on indices of depression and self-deception.

Dependent variable		High- insight (N=23)	Low-insight (N=23)	t
Depression				
BDI Depression	M	20.04	11.57	2.44*
	SD	11.55	12.01	
CDS Depression	M	1.17	0.57	2.25*
	SD	0.83	0.99	
CDS Hopelessness	M	1.04	0.83	0.75 ^{ns}
	SD	0.83	1.11	
CDS Self-depreciation	M	0.83	0.78	0.14 ^{ns}
	SD	0.94	1.17	
CDS Guilty Ideas of reference	M	1.04	0.78	0.88 ^{ns}
	SD	0.98	1.04	
CDS Pathological guilt	M	1.26	0.52	2.62*
	SD	1.01	0.90	
CDS Morning depression	M	0.83	0.22	3.12*
	SD	0.83	0.42	
CDS Early wakening	M	0.83	0.26	2.51*
	SD	0.94	0.45	
CDS Suicide	M	0.87	0.30	2.27*
	SD	0.97	0.70	
CDS Observed depression	M	0.78	0.30	2.48*
	SD	0.74	0.56	
Self-deception				
BIDR Self-deceptive enhancement	M	4.17	6.44	2.05*
	SD	2.36	3.83	
BIDR Impression management	M	6.78	9.19	1.65 ^{ns}
	SD	3.46	4.86	

Note. SUMD= Scale to Assess Unawareness of Mental Disorder, 1=high insight, 5=no insight. BDI= Beck Depression Inventory. CDS= Calgary Depression Scale. SAPS and SANS= Scale for the Assessment of Positive symptoms and Scale for Assessment of Negative Symptoms respectively. Higher scores indicate more severe symptomatology on BDI, CDS, SAPS and SANS. BIDR=Balanced Inventory of Desirable Responding. Higher scores indicate greater self-deception or impression management. High and low insight cases are those scoring above and below the group median on a composite index of insight based on the following SUMD subscales: current insight into a mental disorder, current insight into the social consequences of having a mental disorder, past insight into a mental disorder and past insight into the social consequences of having a mental disorder. * $p < .05$. ns = not significant.

A global insight variable was computed by summing these four subscales. The forty six cases were subdivided into those with high insight and low insight depending on whether they scored above or below the median on the combined insight variable that was computed. The high and low-insight subgroups were compared on all demographic variables using t-tests for continuous variable and chi-square tests or fisher exact probability tests for categorical variables. No significant intergroup differences were found. The groups were then compared on the 10 depression and 2 self-deception variables using t-tests. Results of these analyses are presented in Table 7.5. The high insight group and low insight group differed at the .05 level on seven depression variables. These were BDI depression, CDS depression, CDS pathological guilt, CDS morning depression, CDS early waking, CDS suicide and CDS observed depression. The high-insight group showed greater depressive symptomatology on all of these variables. The high insight and low insight groups differed significantly on one self-deception variable. This was BIDR self-deceptive enhancement. The high-insight group showed less self-deception on this variable.

DISCUSSION

It was hypothesised in the current study that in comparison with cases showing high insight, individuals with a diagnosis of schizophrenia showing low insight would be characterized by greater defensive self-deception and consequently show less depressive symptomatology. Our hypothesis is based on the theory that self-deception is used as a defense by individuals with schizophrenia who have poor insight and this accounts for their lower levels of depressive symptomatology. This hypothesis was largely supported by the results of the present study. This is most clearly shown by the third set of analyses, the results

of which are summarized in Table 7.5. These findings can also be interpreted as evidence that depression in schizophrenia arises from a lessening of defensive denial and an increase in insight which results in those individuals with a diagnosis of schizophrenia becoming aware of the tragic circumstances of their condition (McGlashan & Carpenter, 1976; Greenfeld et al., 1989; Wciorka, 1988).

The results from the correlational and multiple regression analyses suggest that different aspects of insight may be differentially associated with defensive self-deception and depressive symptomatology. Current insight into one's condition and its consequences are correlated with many aspects of depressive symptomatology. On the other hand, insight into the presence and social consequences of past episodes of schizophrenia is strongly correlated with self-deception. The specificity of the links between current insight and depression and past insight and self-deception deserves further exploration.

The clear link between high insight and depressive symptomatology are not consistent with the results of a study by Amador et al. (1991) which showed that the ability to accept the label of once having had a psychological disorder was associated with decreased symptoms of depression. The lack of differences between high and low insight groups on demographic variables is consistent with the finding that unawareness of illness in schizophrenia occurs independent of sociodemographic and gender differences (Amador et al., 1991; Carpenter et al., 1976).

The size of the sample, the lack of interrater reliability data for diagnoses and rating scales, and the possible unsuitability of the BIDR as an index of defensive self-deception for people with schizophrenia are the principal limitations of the study. Further research addressing these design limitations would be desirable.

Further work in this broad area of insight and schizophrenia is particularly important because of the implications for clinical practice. Recent efforts in clinical research and treatment have placed increasing emphasis on actively educating the individual with a diagnosis of schizophrenia about the condition, a process that often involves a sustained and active attempt to provide the patient and his or her family members with current scientific evidence and theoretical assumptions about psychosis, its treatment and the importance of adherence to

medication regimes (Chadwick & Lowe, 1990; Dixon & Lehman, 1995). The results of the current study suggest that to improve levels of insight could result in an increased level of depression. An important question is under what conditions may patients be helped to develop insight and avoid the development of depressive symptomatology. Perhaps the issue is one of pacing the delivery psychoeducational information and carefully gauging the patients readiness to integrate such information into their self-concept. The exploration of this issue is a future research priority.

SUMMARY

Forty six individuals with a diagnosis of schizophrenia were divided classified as having or high and low insight on the basis of their scores on the Scale for the Assessment of Unawareness of Mental Disorder. A comparison of the two groups showed that while they were demographically similar, the high insight group showed less defensive self-deception on the Balanced inventory of Desirable Responding and more depressive symptomatology on the Beck Depression Inventory and the Calgary Depression scale. The results were interpreted as supporting the view that self-deception is used as a defense by individuals with schizophrenia who have poor insight and this accounts for their lower levels of depressive symptomatology.

REFERENCES

- Addington, D., Addington, J. & Schissel, B.A. (1990). A depression rating scale for schizophrenics. *Schizophrenia Research*, 3, 247-251.
- Addington, D., Addington, J. & Maticka-Tyndale, E. (1992). Reliability and validity of a depression rating scale for schizophrenics. *Schizophrenia Research*, 6, 201-208.
- Amador, X.F., David, H., Strauss, S. & Gorman, J.M., (1991). Awareness of illness in Schizophrenia. *American Journal of Psychiatry*, 17, 113-132.

- Amador, X.F., Strauss, D.H., Yale, S., Gorman, J.M. & Endicott, J. (1993). The assessment of insight in psychosis. *American Journal of Psychiatry*, 150, 873-879.
- American Psychiatric Association (1994). *DSM-IV: Diagnostic and Statistic Manual of Mental Disorders (4th edition.)*. Washington DC: APA.
- Ananth, J. & Chadirian, A.M. (1980). Drug induced mood disorder. *International Pharmacopsychiatry*, 15, 58-73.
- Andreason, N.C. (1983). *Scales for the Assessment of Positive Symptoms (SAPS)*. Iowa City: University of Iowa.
- Andreason, N.C. (1983). *Scale for the Assessment of Negative Symptoms (SANS)*. Iowa City: University of Iowa.
- Bartko, G., Herczog, I. & Zador, G. (1988). Clinical symptomatology and drug compliance in schizophrenic patients. *Acta Psychiatrica Scandinavica*, 77, 74-76.
- Beck, A.T., Steer, R.A. & Garbin, M.G. (1988). Psychometric properties of the Beck Depression Inventory: Twenty-five years of evaluation. *Clinical Psychology Review*, 8, 77-100.
- Chadwick, P.D.J. & Lowe, C.F. (1990). The measurement and modification of delusional beliefs. *Journal of Consulting and Clinical Psychology*, 58, 225-232.
- David, A.S. (1990). Insight and Psychosis. *British Journal of Psychiatry*, 156, 798-808.
- Dixon, L.B. & Lehman, A.F. (1995). Family Interventions for Schizophrenia. *Schizophrenia Bulletin*, 21, 4, 631-643.
- Greenfeld, D., Strauss, J.S., Bowers, M.B. & Mandelkern, M. (1989). Insight and interpretation of illness in recovery from psychosis. *Schizophrenia Bulletin*, 15, 245-252.
- Hair, J., Anderson, R., Tatham, R. & Black, W. (1992). *Multivariate Data Analysis (3rd ed.)*. New York: MacMillan.
- Heinrichs, D.W., Cohen, B.P. & Carpenter, W.T. Jr., (1985). Early insight and the management of the schizophrenic decompensation. *Journal of Nervous and Mental Diseases*, 173, 133-138.
- Mayer-Gross, W., Slater, E. & Roth, M. (1960). *Clinical Psychiatry (2nd ed.)*. London: Cassell.

- McGlashan, T.H. & Carpenter, W.T.Jr. (1976). Postpsychotic depression in schizophrenia. *Archives of General Psychiatry*, 33, 231-239.
- Paulhus, D. P. (1994). Reference Manual for BIDR Version 6, *Balanced Inventory Of Desirable Responding*.
- Sackheim, H.A. (1983). Self-deception, depression and self-esteem: The adaptive value of lying to oneself. In J. Masling (Ed.), *Empirical studies of Psychoanalytic Theory*. Hillsdale, NJ: Lawrence Erlbaum.
- Siris, S.G. (1991). Diagnosis of Secondary Depression in Schizophrenia: Implications for DSM-IV. *Schizophrenia Bulletin*, 17, 75-98.
- Taylor, E.T. & Brown, J.D. (1988). Illusion and well-being: a social psychological perspective on mental health. *Psychological Bulletin*, 103, 193-210.
- Wciorka, J.A. (1988). Typology of schizophrenic patients' attitudes towards their illness. *Psychopathology*, 21, 259-26.
- World Health Organisation (1992). *The ICD 10 Classification of Mental and Behavioural Disorders: Clinical Descriptions And Diagnostic guidelines*. Geneva: WHO.

