

# Psychological Intervention Outcome Of In-Patients Referred For Insight Oriented Therapy In Federal Neuropsychiatric Hospital, Yaba Lagos

Akinnawo E. O<sup>1</sup>, Ajirofutu O. F<sup>1,2</sup>., Akintoyese O. A.<sup>2</sup>, Olusegun J. O<sup>2</sup>

<sup>1</sup>Department of Behavioral Studies Redeemer's University, Ede, Nigeria.

<sup>2</sup>Department of Psychology, Federal Neuro-Psychiatric Hospital, Yaba, Lagos Nigeria

Correspondence author mail: [tayoajirofutu2000@yahoo.com](mailto:tayoajirofutu2000@yahoo.com)

## Abstract

*Insight has been found to be an integral component that ensures success in most psychiatry treatment. It appears that, the more the client can understand the cause of the illness, the greater their chances of resolving their unpleasant experience. Insight-oriented psychotherapy is a client-centred therapy, a talk therapy that guides clients toward developing and understanding of self. It assumes that the client is healthy and their problem is a result of faulty-thinking. This study focused on testing the efficacy of insight oriented therapy in improving participants' level of illness awareness. Forty three (43) inpatients from a federal government mental health facility were purposively selected based on referrals for individualized insight oriented therapy for a 12-session program. Participants responded to Beck Cognitive Insight Scale prior and after intervention (pre-posttest). The participants were made up of 23 males and 20 females with an average age of  $32.21 \pm 9.31$  who entered therapy session upon referrals. The results revealed that insight oriented therapy had a significant impact on the level of the study sample's insight [ $\text{mean } \Delta = 27.535$   $t(42) = 47.429$   $p < .01$ ]. Conclusively, insight oriented therapy has been found in this study to be efficacious in the management of patient with poor insight. Authors suggested that more clinical trials should be carried out to test its efficacy in larger samples and with control samples.*

**Key words:** *insight oriented therapy, insight, In-patient, mental health, Nigeria*

## Introduction

Frankl (1958) emphasized the importance of understanding ourselves when he argued that our greatest human need is to find a core of meaning and a purpose in life. Hence, insight has been defined as seeing things from a new perspective, making connections between things, and gaining an understanding of why things happen as they do (Elliott *et al.*, 1994). During the insight stage of Hill's (2004) Helping Skills model,

therapists (helpers) assist clients in coming to new understandings of themselves and their problems. The roots of this stage are in Freud's (1940/1949) theory of psychosexual development. Freud believed that manifestations of unresolved problems are repeated throughout the client's life. A goal of psychoanalytic therapy then, is to recognize these repeated manifestations and understand how they influence the client's life. Dealing with problems in the

therapeutic relationship is also important in psychoanalytic therapy, as it provides clients with the skills necessary to handle relationships outside of therapy more effectively.

Insight so far has been identified as a multidimensional concept (Eisen *et al* 1998; Kendler *et al*

1983; Kozak & Foa 1994), which includes components such as understanding that the belief has a psychological/psychiatric reason, and readiness to consider that the belief may be wrong (Eisen *et al* 1998; Kendler *et al* 1983). Insight used to be defined as an understanding of the drive behind one's thoughts or behaviors, as recognition of one's emotional or psychological problems or may even suggest an immediate understanding of a problem-based on various organizational strategies. Insight, however, is a somewhat vague defined, seems to be multi-dimensional and influenced by many internal and external factors (Neziroglu & Stevens 2002). The term "insight" in a psychiatric context was perhaps first defined in 1934 as "a correct attitude to a morbid change in oneself" (Lewis 1934). More recent conceptualizations of insight have been expanded to include the presumed effects of disease awareness on the patient's attitudes and behaviors in everyday life (such as medication adherence), as well as the ability to identify or "relabel" unusual mental events (Davis 1990). Insight is, however, assessed more complexly by asking patients whether they believe they are ill, what possibly caused illness and whether they think that the treatment is needed. Insight into the occurrence of symptoms is just one aspect of a broader concept of insight (Cherian *et al* 2012). "Insight" – also often referred to as a degree of "delusional" – usually means a person's belief that his/her disorder-relevant belief is right (Phillips *et al* 2012). The extent to which a patient

possesses insight into the unreasonable character of the obsessional beliefs and compulsions may contribute to both clinical appearance and treatment outcome (Kozak & Foa 1994; Catapano *et al* 2001; Vogel *et al* 2006).

Over the years, some authors have researched the neuroanatomical correlates of clinical insight, highlighting inverse relationships with volume of the right frontal cortex (Laroi *et al.*, 2000; Flashman *et al.*, 2001; Sapara *et al.*, 2007), particularly the dorso-lateral prefrontal cortex (DLPFC), the anterior cingulate (Ha *et al.*, 2004; Shad *et al.*, 2004, 2006a) and the temporal areas (Ha *et al.*, 2004; Cooke *et al.*, 2008). Other studies reported no relationship (David *et al.*, 1995; Rossell *et al.*, 2003; Bassitt *et al.*, 2007). On the contrary, to date, the neuroanatomical correlates of cognitive insight have been scarcely studied. Only one study (Buchy *et al.*, 2010) reported that the Beck Cognitive Insight Scale composite index was positively correlated with total left hippocampal volume, Self Certainty was inversely correlated with bilateral hippocampal volumes and no correlation was found with SR.

### **Some basic Assumptions/Components of Insight Oriented**

Insight-oriented psychotherapy relies on conversation between the therapist and the client. It helps people through understanding and expressing feelings, motivations, beliefs, fears and desires. Insight-oriented psychotherapy is a client-centred therapy, a type of talk therapy that guides clients toward developing an improved understanding of self. It assumed that the client is healthy and their problem is a result of faulty-thinking. During each session, the individual receiving counselling will recall situations from his or her life. The therapist highlights observed patterns of behaviour or feelings, then encourages the client to

examine them more closely. The philosophy behind this method is that examination and analysis of issues that have negatively affected the client's life will help the individual to understand and change destructive patterns.

During these sessions, deep and intimate conversations occur between the therapist and client. It is necessary for the individual seeking therapy to share life events with complete honesty in order for the facilitator to adequately note patterns and to assist in creating awareness. This approach centers around the belief that it is a person's feelings about early life experiences that influence current behaviors. Through guiding questions and verbal prompts, the therapist helps the client to come to "a-ha" or "light bulb" moments in which insight to problems is gained. These breakthroughs allow the client to feel empowered and to look at a situation more realistically, leading to improved understanding and self-awareness. They are then able to move forward and change behaviors due to this understanding.

Insight-oriented psychotherapy is also used often and in conjunction with medication for treating depression. However, it is less suited for the afflicted individual who is especially emotional/sensitive, has little self-awareness, and is dealing with a major life problem.

In order to assist the client in coming to new understandings of themselves and their problems, the counselor implements a number of particular skills. One intervention a counselor may use in insight-oriented therapy is *challenge*. A challenge points out discrepancies or irrational beliefs of which the client is unaware, unwilling, or unable to change. An example of a challenge is "you're feeling happy that you're divorce is finally complete, but I wonder if you are

also feeling sad at the loss of your marriage."

Another intervention used in this type of therapy is *interpretation*, which is a statement that goes beyond what the client has recognized and gives new meaning or explanations for thoughts, feelings, and behaviors. An example of an interpretation is "I wonder if you are angry with me because I remind you of your mother who was very critical of you." In insight-oriented therapy, counselors may also use *self-disclosure for insight* which is when the counselor presents a personal experience in which he or she gained some insight. An example of a self-disclosure for insight is "in the past I used to avoid getting close to people I was dating, and I realized that it was because I was afraid of being rejected."

Another intervention used in insight-oriented therapy is *immediacy*, which is when the counselor discloses immediate feelings about the client or their relationship in the session. An example of immediacy is "I feel like you are pushing me away right now." Exploration skills such as attending and listening, restatement, reflection of feelings, open questions, and silence are also used in insight-oriented therapy and set the stage for more insight-oriented interventions

A recent and especially methodologically rigorous meta-analysis of psychodynamic therapy, published by the Cochrane Library, included 23 randomized controlled trials of 1,431 patients (Abbass, Hancock, Henderson, & Kisely, 2006). The studies compared patients with a range of common mental disorders who received short-term (40 hours) psychodynamic therapy with controls (wait list, minimal treatment, or "treatment as usual") and yielded an overall effect size of 0.97 for general symptom improvement. The effect size increased to 1.51 when the patients were assessed at long-term follow-up (-9 months post treatment). In addition to

change in general symptoms, the meta-analysis reported an effect size of 0.81 for change in somatic symptoms, which increased to 2.21 at long-term follow-up; an effect size of 1.08 for change in anxiety ratings, which increased to 1.35 at follow-up; and an effect size of 0.59 for change in depressive symptoms, which increased to 0.98 at follow-up. The consistent trend toward larger effect sizes at follow-up suggests that psychodynamic therapy sets in motion psychological processes that lead to on-going change, even after therapy has ended.

A newly released meta-analysis by Abbass, Kisely, & Kroenke, 2009 examined the efficacy of short-term psychodynamic therapy for somatic disorders, the study reported effect sizes of 0.69 for improvement in general psychiatric symptoms and 0.59 for improvement in somatic symptoms.

Among studies that reported data on health care utilization, 77.8% reported reductions in health care utilization that were due to psychodynamic therapy—a finding with potentially enormous implications for health care reform.

A meta-analysis reported in the *American Journal of Psychiatry* examined the efficacy of both psychodynamic psychotherapy (14 studies) and CBT (11 studies) for personality disorders (Leichsenring & Leibling, 2003). The meta-analysis reported pre-treatment to post treatment effect sizes using the longest term follow-up available. For psychodynamic therapy (mean length of treatment was 37 weeks), the mean follow-up period was 1.5 years and the pre-treatment to post treatment effect size was 1.46. For CBT (mean length of treatment was 16 weeks), the mean follow-up period was 13 weeks and the effect size was 1.0. The authors concluded that both treatments demonstrated effectiveness. A more recent review of

short-term (average of 30.7 sessions) psychodynamic therapy for personality disorders included data from seven randomized controlled trials (Messer & Abbass, in press). The study assessed outcome at the longest follow-up period available (an average of 18.9 months post treatment) and reported effect sizes of 0.91 for general symptom improvement (N 7 studies) and 0.97 for improvement in interpersonal functioning (N 4 studies).

Two recent studies examined the efficacy of long-term psychodynamic treatment. A meta-analysis reported in the *Journal of the American Medical Association* (Leichsenring & Rabung, 2008) compared long term psychodynamic therapy (1 year or 50 sessions) with shorter term therapies for the treatment of complex mental disorders (defined as multiple or chronic mental disorders, or personality disorders) and yielded an effect size of 1.8 for overall outcome. The pre-treatment to post treatment effect size was 1.03 for overall outcome, which increased to 1.25 at long-term follow-up ( $p < .01$ ), an average of 23 months post treatment. Effect sizes increased from treatment completion to follow-up for all five outcome domains assessed in the study (overall effectiveness, target problems, psychiatric symptoms, personality functioning, and social functioning). A second meta-analysis, reported in the *Harvard Review of Psychiatry* (de Maat, de Jonghe, Schoevers, & Dekker, 2009), examined the effectiveness of long-term psychodynamic therapy (average of 150 sessions) for adult outpatients with a range of diagnoses. For patients with mixed/moderate pathology, the pre-treatment to post treatment effect was 0.78 for general symptom improvement, which increased to 0.94 at long-term follow-up, an average of 3.2 years post treatment. For patients with severe personality pathology, the pre-treatment to post

treatment effect was 0.94, which increased to 1.02 at long-term follow-up, an average of 5.2 years post treatment

In the light of these considerations, the clinical relevance of cognitive insight is quite promising, because it is a reliable way of establishing a genuine prognosis of patients at risk of poor compliance with treatment as well as an important factor at developing more efficient therapeutic strategies. This provoked the need to research into the efficacy of insight-oriented therapy, particularly how applicable it is in our society.

### **Objectives of the study**

1. To identify the possible correlates of insight level among psychiatric in-patient
2. To establish the efficacy of Insight oriented therapy in the treatment of insight related problems among psychiatric in-patient

### **Scope of the study**

This study only covered the hospital in-patient only. Although patients were selected across different wards within the hospital, however, patient outside the hospital and those within the hospital that have no issue with poor insight were excluded from the study.

### **Operational Definition of term**

**Age:** the length of time during which a being has existed; usually measured by years from birth.

**Gender:** this is related to the biological differences that could be attributed to nature between a male and female.

**Marital Status:** it is a state of being married, single, separated or widowed.

**Employment Status:** this relates to the occupational relevance of an individual. It involves whether an individual is involved in a productive vocation or not.

**Insight:** is defined as the awareness by a mentally ill person that their mental experiences are not based in external reality. For the purpose of this study, the level of insight will be measured by scores on the Beck Cognitive Insight Scale. The index (composite) score will be calculated and participants that scored well above the mean were adjudged to be of good insight while participants that scored lower than the mean were placed in the poor insight category.

**Insight Oriented therapy:** this is form of psychological intervention treatment procedures focused on resolving issues with insight by guiding client to understand self. It helps people through understanding and expressing feelings, motivations, beliefs, fears and desires.

**Therapy:** it is used interchangeably with the word Psychotherapy and simply means treatment of the mind with talk. The form adopted for this study is a client centred individualised therapy.

### **Hypothesis**

1. There will be a significant relationship among the study variables
2. Insight Oriented therapy will significantly improve the level of insight among participants.

### **Ethics**

Ethical approval was gotten by the Federal Neuro-psychiatric Hospital, Yaba Ethical Committee before the onset of the study. Participants gave informed consent before inclusion in the study, as they voluntarily came into session upon referral. No financial inducement was given to any of the

respondents. The research team made up of trained psychologists were involved in both the testing and the intervention procedures.

### **Design**

An experimental design (ex-post factor) was adopted for this study.

### **Sampling**

A total of 43 in-patients were purposively selected for this study from Federal-Neuropsychiatric Hospital Yaba, Lagos. The base of their selection was the presence of poor insight into their mental health condition as well as referral for the insight oriented therapy. The poor insight was noted from consultant psychiatrist's clinical judgment and was later confirmed by the research team by low scores on the Beck cognitive Insight Scale.

### **Participants**

The population for this study was selected from psychiatric in-patient from the Federal Neuro-psychiatric Hospital, Yaba. These inpatient were seen in psychotherapy upon referral, hence they all have different time of termination. The participants all went through the insight oriented therapy session for 12 weeks duration. A measure of insight level was administered to participants before and after the intervention-insight oriented therapy-. These participants were distributed across age, gender, and religious affiliation among other personal variables, in order to have a representative sample population. This helped to ascertain if the changes observed was really due to the intervention but not other factors.

### **Instruments**

A battery of test was administered in form of questionnaire to collect data for the study. Each questionnaire was segmented into two sections; that is section A and B.

**Section A** contained the participants socio-demographic information as well as some clinical variables which included serial number, age, sex, level of education, marital status, employment status, diagnosis, Number of admission, history of previous contact with any psychological service, and duration of illness

**Section B** contained the items adopted from Beck Cognitive Insight Scale developed by Beck, Baruch, Balter, Steer, and Warman (2004) to measure the level of insight of patient. Respondents are asked to rate how much they agree with each statement by using a 4-point scale that ranges from 0 (do not agree at all) to 3 (agree completely). No time frame for the ratings is provided. This self-report instrument was constructed to contain two sets of items. The first set included items relevant to objectivity, reflectiveness, and openness to feedback. The questions were written to capture patients' recognition that they could be wrong even when they felt strongly that they were right (item #8), that other people could be more objective (#3) than they were, and that they were willing to consider other people pointing out that their beliefs were wrong (#12). An item was included to evaluate the patients' acceptance of the notion of alternative explanations (#14). There were also items about patients being receptive to feedback (items #12), being able to make more adaptive attributions (#5, #15), and being able to admit to inadequate cognitive strategies (#4). "Perspective" was based on the recognition that patients had misconstrued peoples' attitudes towards themselves (#1), that they had jumped to conclusions too fast (#4), that certain experiences that had seemed real were due to their imagination (#5), that some of the ideas he or she believed to be true were false, and that some of their unusual experiences were due to their being upset or

stressed (#15). The second set of items in the BCIS was written to address decision-making regarding mental products: jumping to conclusions, certainty about being right, and resistance to correction. These six items addressed a patient's certainty about his or her beliefs and conclusions, such as doing something if it feels right (#7), dogmatic rightness (#2, #13), and resistance to feedback from others (#9, #10, #11).

A composite index of the Beck cognitive insight scale reflecting cognitive insight was calculated by subtracting the score for the self-certainty scale from that of the self-reflectiveness scale (as provided by the authors' manual). The authors reported mean BCIS self-reflectiveness and self-certainty scores for the total sample were, respectively, 14.01 (S.D. = 4.84) and 6.99 (S.D. = 3.50). The correlation between the self-reflectiveness and self-certainty scores was 0.16 and not significant. The mean composite index score was 7.02 (S.D. = 5.51). Beck et al (2004) also reported internal consistency of .68 and .60 (for self-reflectiveness and self-certainty respectively) for a sample of 150. The authors also reported a significant convergent validity with Scale to Assess Unawareness of Mental Disorder (SUMD-A; Amador et al, 1994).

### Data analysis

The data was analyzed using SPSS package (21), statistical tools such as simple percentage, mean, t-test for independent samples, Pearson Product moment correlation analysis, and regression analysis were adopted for the purpose of this study.

### Results

**Table 1: Descriptive Statistic Showing the Demographic Distribution of the participants for the study**

Variables	Options	Frequencies	Percentage
<b>Gender</b>	Male	23	53.5
	Female	20	46.5
	Total	43	100.0
<b>Marital Status</b>	Single	21	48.8
	Married	22	51.2
	Total	43	100.0
<b>Highest Educational Qualification</b>	Primary	5	11.6
	Secondary	22	51.2
	Tertiary	13	30.2
	Post-Tertiary	3	7.0
	Total	43	100.0
<b>Occupational Status</b>	Employed	22	51.2
	Unemployed	17	39.5
	Self-employed	4	9.3
	Total	43	100.0
<b>Psychiatric Diagnosis</b>	Schizophrenia	12	27.9
	Major Depression	18	41.9
	Bipolar Affective disorder	8	18.6
	MBD secondary to MSA	5	11.6
	Total	43	100.0
<b>Have you ever been into any psychological intervention before (e.g CBT)</b>	Yes	19	44.2
	No	24	55.8
	Total	43	100.0
<b>Duration of illness in years</b>	below one year	21	48.8
	one-five years	17	39.5
	above five years	5	11.6
	Total	43	100.0
<b>No of Admission</b>	Once	18	41.9
	Twice	20	46.5
	Thrice	1	2.3
	Four times	4	9.3
	Total	43	100.0

*Age: ranges from 19-55, Mean=32.21  
 SD=9.31*

The result in Table 1 above shows that from the list of valid sampled participants, 23(53.5%) were males, while 20(46.5%) were females. The age range of 19-25years was observed among participants with a mean age of 32.21 (SD9.31) years old. The distribution in marital status indicated that 21(48.8%) of the sampled respondents were single, while 22(51.2) were married. From the data on highest education qualification, it was noted that 5(11.6%) were primary school certificate, 22(51.2%) had secondary school certificate. 13(30.2%) had either a tertiary institution certificate, while 3(7%) were postgraduate certificate holder. On the distribution into occupational status, it was revealed that 39.5% of the participants were unemployed while 51.2% were employed to one firm, organization, or institution or the other, only 9.3% were self-employed. The occupational status was later grouped into employed and unemployed and a total of 39.5% and 60.5% were employed and unemployed respectively. Majority of the participants were patient diagnosed of Major Depression (41.9%) and Schizophrenia (27.9%) while Mental and Behavioural Disorder secondary to Multiple substance abuse and Bipolar affective disorder had 11.6% and 18.6% respectively. 24(55.8) reported to have had previously participated in or psychological intervention or the other. Information on the duration of illness of participants indicated that, 21(48.8%) were below one year, 17(39.5%) were between one and five years, while only 5(11.6%) of the participants have been ill for over five years. Majority of the participants were having their second admission (46.5%), 18(41.9%) of the respondents had their current admission as their first, 2.3% and 9.3% of the respondents have had three and four admissions respectively.

**Table 2: showing the mean score of participants on BCIS before and after the intervention –insight oriented therapy-**

Variables		Mean(SD)
Pre-test	Self-reflectiveness	5.88(2.62)
	Self-certainty	14.42(2.45)
	Composite BCIS	-8.55(3.74)
Post-test	Self-reflectiveness	21.72(2.64)
	Self-certainty	2.72(1.76)
	Composite BCIS	19.00(2.75)

*N=43; BCIS: Beck Cognitive Insight Scale*

The mean for Beck cognitive insight scale self-reflectiveness and self-certainty scores for the total sample in this present study is presented in the table above. An index mean of -8.55(SD=3.74) and 19(SD=2.75) were obtained for the score on the before and after measures respectively. These mean scores were used to categorize participants to poor and good insight categories.

**Table 3: Correlations of the Beck Cognitive Insight Scale subscales and index with selected psychosocial characteristics across different diagnosis**

Variables	1	2	3	4	5	6	7
1. Age of participants	1						
2. Gender		1					
3. History of Psy Inter	.110		1				
4. Occupational Status	.365*		.049	1			
5. Self-reflectiveness	.182				1		
6. Self-Certainty	.003	.138	.094	.202		1	
7. Insight		-.084			-.085		1
	.073	.018	.076				
	.050	.042	.078	.192	.757**		-.1
							.716**

\*. Correlation is significant at the 0.05 level (2-tailed).

\*\*. Correlation is significant at the 0.01 level (2-tailed).

The result presented in the table 3 above indicated that there were no significant correlations between the selected demographic information provided by the participants and their level of insight. However, the subscales of Beck Cognitive

insight scale correlates significantly. While the domain of Self-reflectiveness had a significant positive correlation with the index (insight level) [r(43)= .757 p<.01], the Self-Certainty domain had a significant but negative correlation [r(43)= -.716 p<.01]. this indicates that patient that increase in

self-reflectiveness increases the tendencies of good insight while a decrease will tend to result into poor insight. On the other hand, a decrease in Self-Certainty was observed to improve the likelihood of a good insight while increase of self-certainty will tend to lead to poor insight.

**Table 4: Dependent Sample t-test showing the significant difference in Insight Level due to Intervention (Insight Oriented Therapy)**

	BCIS	Mean	N	SD	t	Df	P
Insight Oriented Therapy	Pre-BCIS	-8.5349	43	3.73751	47.429	42	<.01
	Post-BCIS	19.00	43	2.75162			

*BCIS: Beck Cognitive Insight Scale*

From the table above, participants that went through insight oriented therapy reported a significant high level of insight into their mental health problems with a mean change

of [Mean change = **27.535**; t(42)=47.429 p<.01].

**Table 5: One way ANOVA Showing the influence of participants' psychiatric diagnoses on cognitive insight**

		Sum of Squares	df	Mean Square	F	Sig.
SR_pre	Between Groups	5.882	3	1.961	.271	.846
	Within Groups	282.536	39	7.245		
	Total	288.419	42			
SR_post	Between Groups	30.657	3	10.219	1.521	.224
	Within Groups	261.994	39	6.718		
	Total	292.651	42			
SC_pre	Between Groups	80.473	3	26.824	6.083	.002
	Within Groups	171.992	39	4.410		
	Total	252.465	42			
SC_post	Between Groups	12.507	3	4.169	1.376	.264
	Within Groups	118.144	39	3.029		
	Total	130.651	42			
pre_index	Between Groups	48.553	3	16.184	1.173	.332
	Within Groups	538.144	39	13.799		
	Total	586.698	42			
Post_Index	Between Groups	4.772	3	1.591	.198	.897
	Within Groups	313.228	39	8.031		
	Total	318.000	42			

The results from the table above indicated that psychiatric diagnosis had statistical significance influence on the Self-Certainty dimension of cognitive insight before the commencement of the intervention [F(3, 39)=6.083 p<.05]. In view of this finding, a

multiple comparison of the diagnosis groups was done against the Self-certainty dimension of the cognitive insight to ascertain which of the groups have most or least insight level.

**Multiple Comparisons**

Dependent Variable: Self Certainty before intervention  
LSD

(I) Psychiatric Diagnosis	(J) Psychiatric Diagnosis	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Schizophrenia	Major Depression	-2.41667*	.78263	.004	-3.9997	-.8337
	Bipolar Affective disorder	-3.79167*	.95852	.000	-5.7305	-1.8529
	MBD secondary to MSA	-1.01667	1.11782	.369	-3.2777	1.2443
Major Depression	Schizophrenia	2.41667*	.78263	.004	.8337	3.9997
	Bipolar Affective disorder	-1.37500	.89233	.131	-3.1799	.4299
	MBD secondary to MSA	1.40000	1.06161	.195	-.7473	3.5473
Bipolar Affective disorder	Schizophrenia	3.79167*	.95852	.000	1.8529	5.7305
	Major Depression	1.37500	.89233	.131	-.4299	3.1799
	MBD secondary to MSA	2.77500*	1.19719	.026	.3535	5.1965
MBD secondary to MSA	Schizophrenia	1.01667	1.11782	.369	-1.2443	3.2777
	Major Depression	-1.40000	1.06161	.195	-3.5473	.7473
	Bipolar Affective disorder	-2.77500*	1.19719	.026	-5.1965	-.3535

\*. The mean difference is significant at the 0.05 level.

The Post hoc table above indicated that, the Schizophrenia group scored statistically and significantly Lower score on cognitive insight measure compared to Major Depression (mean difference= 2.417 p<.05) and Bipolar Affective disorder (mean difference= 3.792 p<.01), while the difference with MBD secondary to MSA was not statistically significant.

**Discussion**

The current study has found no significant correlation between Age of participants, Gender, previous contact with psychological intervention, employment status and cognitive insight. However, Cognitive Insight demonstrated a significant positive and negative correlation with Self-reflectiveness and self-certainty respectively. This result partially supported the formulated hypothesis one. In

consistency with the current findings, related studies have found no significant with age, gender, duration of illness, number of relapses, years of education, or marital status (Kim *et al.* 2015). This interpretes that, individuals differences on age gender and other demographic and clinical variables does relate to the level of cognitive insight observed in the study participants.

Similarly the findings of this current study which stated that, resulting insight is most likely to be poor with a lower-levels of self-reflection and greater-levels of self-certainty has been supported by earlier findings (Bora *et al.*, 2007; Engh *et al.*, 2010; Bruno *et al.* 2011; Lysaker *et al.*, 2011).

In addition, the second hypothesis which stated that there will be a significant improvement in participant level of insight at the end of the first 12session was confirmed as participants reported a high

level of a good insight into their mental health problems.

### Conclusion

As indicated from the finding of this study, age, duration of infertility, duration of marriage were found not to be significantly related to cognitive insight of psychiatric inpatient. The findings established that, individuals that rated high on self-reflectiveness with a lower level of self-certainty will tend to exhibit an improved cognitive insight. It was also gathered from the results to this finding that when patients went through insight oriented therapy session for at least 12sessions, such will achieve a significant improvement in his/her level of adaptive cognitive insight. As a result of this revelation, insight is not just a uni-dimension psychological construct, it involves some psychological processes and hence a focus on the psychological processes involved is the best way of improving it. Less focus should be directed to personal information such as age, sex, educational qualification, employment status, and so on as none of the listed were found to be significantly related to insight level among psychiatric patient.

### References

- Bassitt, D.P., Neto, M.R., de Castro, C.C., Busatto, G.F. (2007). Insight and regional brain volumes in schizophrenia. *European Archives of Psychiatry and Clinical Neuroscience*, 257, 58–62.
- Bora E, Erkan A, Kayahan B, Veznedaroglu (2007). Cognitive insight and acute psychosis in schizophrenia. *Psychiatry Clin Neurosci.*;61:pp634–9.
- Bruno N., Sachs N., Demily C., Franck N., Pacherie E. (2011)Delusions and metacognition in patients with schizophrenia. *Cogn Neuropsychiatry*.17:pp1–18
- Buchy, L., Czechowska, Y., Chochol, C., et al. (2010). Toward a model of cognitive insight in first-episode psychosis: verbal memory and hippocampal structure. *Schizophrenia Bulletin*, 36, 1040–9.
- Catapano F., Sperandeo R., Perris F., Lanzaro M., & Maj M. (2001). Insight and resistance in patients with obsessive-compulsive disorder. *Psychopathology*. 34: 62–68.
- Cherian A. V., Narayanaswamy J. C., Srinivasaraju R., Viswanath B., Math SB, Kandavel T, et al (2012). Does insight have specific correlation with symptom dimensions in OCD? *J Affect Disord*. 138: pp352–359.
- Cooke, M.A., Fannon, D., Kuipers, E., Peters, E., Williams, S.C., Kumari, V. (2008). Neurological basis of poor insight in psychosis: a voxel-based MRI study. *Schizophrenia Research*, 103, 40–51.
- David, A., van Os, J., Jones, P., Harvey, I., Foerster, A., Fahy, T. (1995). Insight and psychotic illness. Cross-sectional and longitudinal associations. *British Journal of Psychiatry*, 167, 621–8.
- Eisen J. L., Phillips K. A., Baer L., Beer D. A., Atala KD, Rasmussen S. A. (1998). The Brown Assessment of Beliefs Scale: Reliability and validity. *Am J Psychiatry*. 155: 102–108.
- Engh JA, Friis S, Birkenaes AB, Birkenaes AB, Jonsdottir H, Klungsoyr O, Ringen PA. (2010) Delusions Are associated with poor cognitive insight in schizophrenia. *Schizophr Bull.*;36: pp830–835.
- Flashman, L.A., McAllister, T.W., Johnson, S.C., Rick, J.H., Green, R.L., Saykin, A.J. (2001). Specific frontal lobe subregions correlated with unawareness of illness in

- schizophrenia: a preliminary study. *Journal of Neuropsychiatry and Clinical Neuroscience*, 13, 255–7.
- Frank, J. D., Gliedman, L.H., Imber, S. D., Nash, E. H., Stone, A. R. (1957). Why patients leave psychotherapy. *Archives of Neurology & Psychiatry (Chicago)*, 77, 283-299.
- Freud, S. (1949). *An outline of psychoanalyss*. (J. Strachey, Trans.). New York: Norton. (Original work published 1940).
- Ha, T.H., Youn, T., Ha, K.S., et al. (2004). Gray matter abnormalities in paranoid schizophrenia and their clinical correlations. *Psychiatry Research*, 132, 251–60.
- Hill, C. E. (2004). *Helping skills: Facilitating exploration, insight, and action*. Washington, DC: APA.
- Kendler K. S., Glazer W. M., Morgenstern H. (1983). Dimensions of delusional experience. *Am J Psychiatry*. **140**: 466–469.
- Kozak M. J. & Foa E. B. (1994). Obsessions, overvalued ideas, and delusions in obsessive compulsive disorder. *Beh Res Ther*. **32**: pp343–353.
- Laroi, F., Fannemel, M., Ronneberg, U., et al. (2000). Unawareness of illness in chronic schizophrenia and its relationship to structural brain measures and neuropsychological tests. *Psychiatry Research*, 100, 49–58.
- Lewis A (1934). The psychopathology of insight. *J Med Psychol*. **14**: 332–348.
- Lysaker P. H, Olesek K. L., Warman D. M., Martin J. M., Salzman A. K., Nicolò G., ...Dimaggio, G. (2011) Metacognition in schizophrenia: Correlates and stability of deficits in theory of mind and self-reflectivity. *Psychiatr Res*. 190:pp18–22.
- Neziroglu F. & Stevens K. P. (2002). Insight: its conceptualization and assessment. In: Frost RO, Steketee G, editors. *Cognitive Approaches to Obsessions and Compulsions: Theory, Assessment, and Treatment*. Elsevier Science Ltd., Oxford, UK, p.183–193.
- Rossell, S.L., Coakes, J., Shapleske, J., Woodruff, P.W., David, A.S. (2003). Insight: its relationship with cognitive function, brain volume and symptoms in schizophrenia. *Psychological Medicine*, 33, 111–9.
- Sapara, A., Cooke, M., Fannon, D., et al. (2007). Prefrontal cortex and insight in schizophrenia: a volumetric MRI study. *Schizophrenia Research*, 89, 22–34.
- Shad, M.U., Muddasani, S., Keshavan, M.S. (2006a). Prefrontal subregions and dimensions of insight in first-episode schizophrenia\_a pilot study. *Psychiatry Research*, 146, 35–42.
- Shad, M.U., Muddasani, S., Prasad, K., Sweeney, J.A., Keshavan, M.S. (2004). Insight and prefrontal cortex in first-episode schizophrenia. *Neuroimage*, 22, 1315–20.
- Shad, M.U., Tamminga, C.A., Cullum, M., Haas, G.L., Keshavan, M.S. (2006b). Insight and frontal cortical function in schizophrenia: a review. *Schizophrenia Research*, 86, 54–70.
- Vogel P. A., Hansen B., Stiles T. C., Gotestam K. G. (2006). Treatment motivation, treatment expectancy, and helping alliance as predictors of outcome in cognitive behavioral treatment of OCD. *J Behav Ther Exp Psychiatry*. **37**: 247–255.