Social Problem Solving Profile among Personality Disorder Individuals

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Abstract: *Aim of the study*: The aim of this research is to study social problem solving profile among individuals with personality disorders. *Design*: This study is exploratory & correlative study that identifies social problem solving profile of people with personality disorders *Setting*: This study was conducted at governmental psychiatric outpatient clinics in Riyadh city. *Subjects*: The Total numbers of participants was 150 individuals. All the subjects enrolled at psychiatric outpatient clinics who had personality disorders were subjected for the study & selected during the time of data collection. Result of this study concluded that the majority of personality disorders type among the study subjects was obsessive compulsive personality. However the Negative Problem Orientation (NPO) domain had the highest median & mean score, whereas the domains of Positive Problem Orientation (PPO) had the lowest median & mean score among study population.Researcher recommend develop a programs and ongoing courses for nurses working with personality disorder clients.

Key words: Positive Problem Orientation (PPO) · Negative Problem Orientation (NPO) · Rational Problem Solving (RPS) · Impulsivity\ Carelessness Style (ICS) · Avoidance Style (AS) · Cluster A · Cluster B · Cluster C · Otherwise Specified

INTRODUCTION

The inability to effectively cope with social problems, along with negative personal and social consequences this engenders, is a necessary and sufficient condition for developing a psychological disorders, in fact, deficits in problem- solving ability have been identified in several mental health disorders [1-3].

The Personality disorder is a common and chronic disorder. Its prevalence is estimated between 10 and 20 percent in the general population and its duration is expressed in decades. This means that atleast one in every five to ten individuals in the community has personality disorder [4-7].

Many instances of violent and nonviolent crime and a large percentage of the prison population are associated with underlying personality disorder. This mean that they are lacking logic problem solving. Grant, It was found that 14.79% of adult Americans living in the community had at least one personality disorder. They found that the most prevalent personality disorders were obsessive -compulsive personality disorder (7.88%),

followed by paranoid (4.41%), antisocial (3.63%), schizoid (3.13%), avoidant (2.36%), histrionic (1.84%) and dependent (0.49%) personality disorders [8-11].

Personality disorders represent a staggering burden to society. Yet the significance of the personality disorders extends far beyond the suffering of the affected individuals and their families [12-14].

A study by APA stated that between 50 % and 78% of adult prisoners are believed to meet criteria for one or more personality disorders and even higher prevalence estimates have been reported among young offenders [15, 16].

Saudi Arabia one of the countries that the occurrence of personality disorders is increasing markedly appear in the past ten years. According to the Saudi Ministry of Health surveys the prevalence of personality disorders among population both sexes in outpatients department carried out on 2002, 2003, 2005 & 2010 it revealed that the prevalence were 1997 patients, 3491 patients, 3687 patients & 3629 from the total of population 124577, 271500, 231712 & 469256 respectively. And in inpatients department were 146 patients, 163 patients, 201 patients &

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21 patients for repeated admission patient from the total of population 7456, 8471, 10442 & 17699 respectively. That means the prevalence of personality disorders are increasing through the years [8].

Because the huge increase in the prevalence of personality disorders in Saudi Arabia Kingdom and because the social problem solving is difficult issue for those people, also, there is no previous definite study published about personality disorders and the relationship between the personality disorders among individuals and their social problem solving profile in Saudi Arabia. Therefore, it is necessary to assess the social problem solving abilities among individuals with personality disorders.

Aim of Study: A study of social problem solving profile among individualswithPersonality disorders.

The aim of the study will be reached through the following objectives:

- Survey the individuals with personality disorders enrolled at Psychiatric government outpatient clinic.
- Detect social problem profile of those who proved to be included as personality disorders.

MATERIALS AND METHODS

Material
Design: This study is exploratory &correlative study that identifies social problem solving profile of people with personality disorders through use of standardized structured questionnaire.

Settings: This study was conducted at governmental psychiatric outpatient clinics in Riyadh city. Mainly clinics associated with the following settings:

First: Hospital related to King Saud University (King Khaled hospital & King Abdel Aziz university hospital).

Second: Ministry of health hospital (Alamal Complx).

Third: Military Hospital namely National Guard Hospital & Military hospital.

Subject: The Total numbers of participants was 150 individuals. All the subjects enrolled at psychiatric outpatient clinics who had personality disorders were subjected for the study & selected during the time of data collection.

The following criteria were used for selecting the study subject:

- Both sexes who agreed to participate in this study.
- Range of age is open.
- The presence of at least one personality disorder according to Diagnostic and Statistical Manual of Mental Disorders - revised (4th edition, 2009).
- The absence of major functional psychosis, (such as: delusion, hallucination)
- Willing to participate in study.
- Enrolled at the time from June 2010 to March 2012.

Distributed of the subjects were as following in Figure 1:

Tool: A structured interview questionnaire was done by Social problem solving inventory-Revised according to D' Zurilla *et al.* [17] and through literature review. The tool includes three parts as the following:

Part I: Personal Socio-demographic characteristic related to patient include: sex, age, marital status, No. of children, level of education, occupation, housing type, monthly income, housing condition, number of family member.

Part II: Medical data such as: type of personality disorder, presence of other psychiatric disorder, presence of chronic medical disease.

Part III: Social problem solving inventory-Revised according to (SPSI-R; D' Zurilla*et al.* [17].

The SPSI-R is a 52-item, multi-dimensional measure of social problem-solving ability derived from factor-analytic studiesforMaydeu-Olivares and D'Zurilla [18] of the original theory-driven Social Problem-Solving Inventory for D'Zurilla and Nezu [19]. It consists of five major scales that measure five different problem- solving dimensions. Respondents are asked to rate items on a five-point, Likert-type scale ranging from 0 (*not at all true of me*) to 4 (*extremely true of me*).

Method
Tool Translation Process:

- Tools were translated in to Arabic language by five facultymembersFrom Nursing College, King Saud University.

- After through translation the tools were send by e-mail to a Specialist in English translation, Psychology & Psychiatry (15 specialist for Back translation), Psychology & Psychiatry (15 specialist for Back translation) [20-25].

Actual Study: Collection of data for the present study was done during the period from June 2010 to the end of March 2011. The average time spent for collecting data from each client was approximately 30 – 40 minutes for the interview questionnaire sheet.

Prior studying data collection researcher confirmed the diagnoses of personality disorders by applying Personality Disorder Questionnaire (PDQ-4) (attached at appendix A) to be sure that the study select the appropriate subject for research & to confirm the medical diagnosis.

Before the interview, patient consent was taken, then explanation of the aim of the study and assure them these data will be confidential.

Ethical Issues: An official approval were obtained from the author of the tool of social problem solving revised at the date June 8, 2010 & financial issues were resolved with the tool's owner.

Statistically Analysis: The collected data were coded, organized, tabulated and statistically analyzed using SPSS soft were computed package version 17. Social problem solving scale included nine categories. Each category consists of specific information items yielding a total of 52 points.

RESULTS

Part I: Table 1 describes the personal characteristics of clients in the study population. Their age ranged between 17 and 56 years, with a higher percentage of females (80.0%)

Figure 1 illustrates the distribution of the study population according to hospitals. It shows that more than half of the sample was from King Khaledhospital (56.9%), whereas King Abdul-Aziz hospital was the least represented (4.6%).

Table 2 describes the types of personality of studied clients. As noticed, the obsessive personality disorder type was the most prevalent (50 clients), followed by the avoidant personality type (16 clients) and the borderline personality (15 clients). Most of the clients
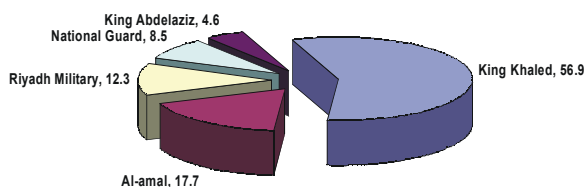

Fig. 1: Distribution of the study subject by hospitals (n=130)

Table 1: Personal characteristics of clients in the study population (n=130)

	Frequency	Percent
Gender:		
Male	26	20.0
Female	104	80.0
Age (years):		
<30	35	26.9
30-	48	36.9
40+	47	36.2
Range	17-56	
Mean±SD	35.7±9.7	

with obsessive personality type personality had no other associated types (33.8%). Similarly, most of the clients with avoidant personality type had no other associated types (10.8%).

Part II: Social problem solving profile:

Figure 2 illustrates the median standardized SPSI-R scores among studied clients. It shows that the Negative Problem Orientation (NPO) domain had the highest median score (122.0), whereas the domains of Positive Problem Orientation (PPO) had the lowest median score (90.0).

Table 3 presents the standardized SPSI-R scores among studied clients. It is evident that the Negative Problem Orientation (NPO) domain had the highest mean score (121.9), followed by the Impulsivity/ Carelessness Style (ICS) domain (110.4).

On the other hand, the domains of Positive Problem Orientation (PPO) and Problem Definition and Formulation (PDF) had the lowest mean scores, 89.2 and 92.2, respectively. The total mean±SD standardized SPIS-R score was 85.5±15.2.

Part III: pPersonality disorder types Versus Social Problem Solving profile:

A correlation matrix of standardized scores of SPSI-R domains is presented in Table 4. It demonstrates statistically significant correlation among almost all domains.

Table 2: Types of personality among clients in the study population (n=130):

A) Clusters A,B &C:

Types	No.	Subtypes	No	%
Cluster A	23		23	17.7
		Cluster A	6	4.6
		Cluster A & Obsessive Personality	2	1.5
		Cluster A & Narcissistic Personality	1	0.8
		Cluster A & Borderline personality	1	0.8
		Paranoid Personality disorders	10	7.7
		Schizoid personality disorders	1	0.8
		Schizoid & Avoidant personality	1	0.8
		Schizoid & paranoid personality	1	0.8
Cluster B	16		16	12.3
		Cluster B	1	0.8
		Borderline personality disorders	15	11.5
Cluster C	76		76	58.5
		Cluster C	6	4.6
		Anxious personality disorders	4	3.1
		Obsessive compulsive personality	44	33.8
		Obsessive & Paranoid Personality	1	0.8
		Obsessive & Schizoid Personality	1	0.8
		Obsessive &Borderline Personality	1	0.8
		Obsessive Personality& Cluster A	1	0.8
		Obsessive & Dependent Personality	1	0.8
		Avoidant personality disorders	14	10.8
		Avoidant & Obsessive personality	2	1.5
		Avoidant & Anxious Personality	1	0.8

B) Otherwise specified personality disorders:

Otherwise specified personality disorders	12	Otherwise specified personality disorders	12	9.2
Others	3		3	2.3
		Depressive Personality	1	0.8
		Excited Personality	1	0.8
		Sensitive Personality	1	0.8

Table 3: Standardized scores of SPSI-R domains and total among clients in the study population (n=130)

SPSI-R Domains	Scores						
	Mean	Median	SD	Min.	Max.	Interquartile range	
PPO	89.2	90.0	17.8	47	131	76.3	102.0
NPO	121.9	122.0	18.8	80	165	110.5	134.3
PDF	92.2	95.0	19.4	52	133	78.0	106.0
GAS	94.1	94.0	16.8	59	136	82.0	105.0
DM	94.7	97.0	19.3	54	137	81.0	109.0
SIV	98.9	102.0	19.0	60	136	87.0	113.0
RPS	94.1	95.0	17.5	52	130	81.0	107.0
ICS	110.4	107.0	16.7	79	155	97.8	122.0
AS	107.7	107.0	14.3	80	141	96.0	120.0
Total score	85.5	85.5	15.2	51	115	75.0	98.0

PPO = Positive Problem Orientation   NPO = Negative Problem Orientation

PDF = Problem Definition and Formulation   DM = Decision Making

GAS = Generation of alternative solutions   AS = Avoidance Style

RPS = Rational Problem Solving   ICS = Impulsivity/ Carelessness Style

SIV = Solution Implementation and Verification.

Table 4: Correlation matrix of standardized scores of SPSI-R domains

	Pearson correlation (SPSI-R scores)								
	SPPO	SNPO	SPDF	SGAS	SDM	SSIV	SRPS	SICS	SAS
PPO									
NPO	-.27**								
PDF	.52**	-.08							
GAS	.41**	.04	.69**						
DM	.42**	-.04	.71**	.62**					
SIV	.52**	-.16	.63**	.46**	.52**				
RPS	.56**	-.07	.91**	.82**	.85**	.79**			
ICS	-.26**	.48**	-.30**	-.24**	-.42**	-.31**	-.38**		
AS	-.38**	.48**	-.34**	-.24**	-.33**	-.33**	-.36**	.54**	

PPO = Positive Problem Orientation   NPO = Negative Problem Orientation
PDF = Problem Definition and Formulation   DM = Decision Making
GAS = Generation of alternative solutions   AS = Avoidance Style
RPS = Rational Problem Solving   ICS = Impulsivity/ Carelessness Style
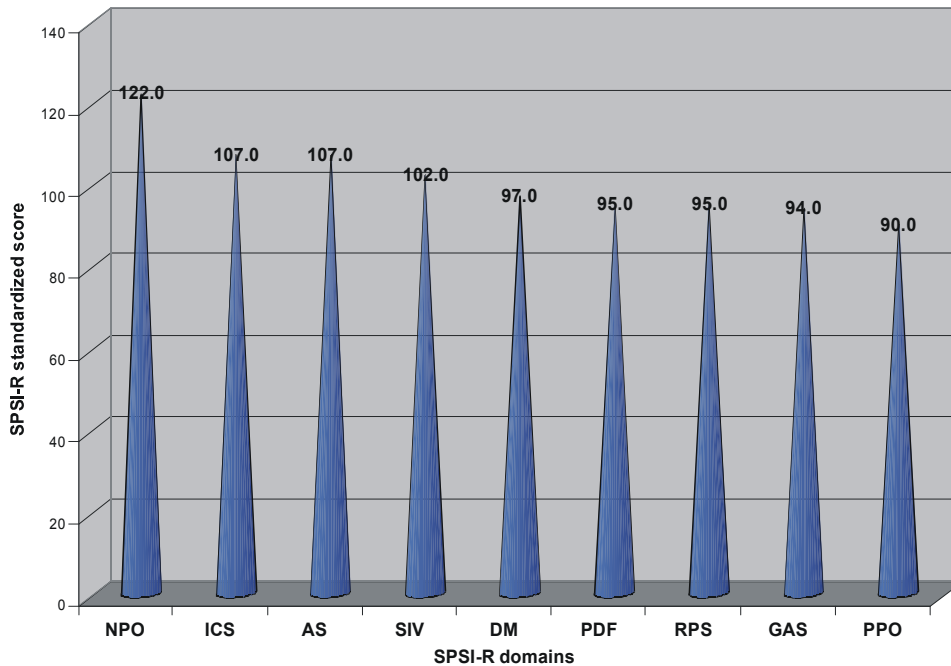SIV = Solution Implementation and Verification.

Fig. 2: Standardized scores of SPSI-R domains and total among clients in the study population (n=130)

PPO = Positive Problem Orientation   NPO = Negative Problem Orientation
PDF = Problem Definition and Formulation   DM = Decision Making
GAS = Generation of alternative solutions   AS = Avoidance Style
RPS = Rational Problem Solving   ICS = Impulsivity/ Carelessness Style
SIV = Solution Implementation and Verification.

The only exception was the domain of Negative Problem Orientation (NPO), which had statistically significant negative correlation (r=-0.27) with the Positive Problem Orientation (PPO) and positive correlations with the domains of Impulsivity/ Carelessness Style (ICS) and Avoidance Style (AS). Meanwhile, the strongest correlation were between the scores of Rational Problem Solving (RPS) and each of the domains of Problem Definition and Formulation (PDF), Generation of alternative solutions (GAS), Decision Making (DM) and Solution Implementation and Verification.(SIV); they were all positive correlations.

DISCUSSION

Social problem solving refers to the process of problem solving as it occurs in the natural environment or "real world" as defined by D'Zurilla and Nezu [19]. Generally speaking, according to D'Zurilla, Nezu, & Maydeu-Olivares [17]. Deficits in social problem solving ability are related to higher levels of psychological distress.

An individual with personality disorders has unusual, enduring traits that cause them to suffer, or that render them unable to cope with life, especially their social problem solving. Deficiencies in social problem solving may lead to violent and aggressive criminal behaviours.

The prevalence of personality disorders varying widely worldwide according to National Institute on Alcohol Abuse and Alcoholism [26] estimates at least 14.9 %.

The magnitude of the problem in Saudi Arabia, a country of over than 22 million people, is a rapidly developing country. the prevalence of personality disorders among population both sexes in outpatients department carried out on 2002, 2003, 2005 & 2010 it revealed that the prevalence were 1997 patients, 3491 patients, 3687 patients & 3629 from the total of population 124577, 271500, 231712 & 469256 respectively.

Moreover, in inpatients department were 146 patients, 163 patients, 201 patients & 21 patients for repeated admission patient from the total of population 7456, 8471, 10442 & 17699 respectively. That means the prevalence of personality disorders are increasing through the years.

According to McMurran, Egan, & Duggan [27] Some factors such as trauma, inadequate parenting, abuse and neglect, Lead to personality disorders which interfering with the acquisition of good social problem solving skills and consequently leading to dysfunctional ways of operating in everyday life.

Deficits in social problem solving in people with personality disorders requiring Problem-solving training, rehabilitationprograms and cognitive–behavioural techniques depending on type of personality disorders.

Generally, Improving social problem solving & social functioning is an important aspect of treating personality disorder.

The aim of this study was to investigate the social problem solving profiles as occur in daily life situations among individuals with personality disorders.

The result of this study revealed that the patients age ranged from 17 - 56 years old, with a higher percentage of females (80.0%). The majority married (91.4%). (Table 1) This is opposite to study result by Stephen M. Herrick [28].

As regards educational level, the majority had secondary level education (31.5 and Only (19.2%) were employed. This result is supported with the M. Tracie %), Shea, McMurran and Oaksford M. *et al*. [29].

On the other hand another studyby Rebecca M. DeMoor [30]. Founded the majority of the results study subjects was male and this is opposite to this study result.In relation to prevalent type of personality disorders in this present study was Obsessive Compulsive personality disorder (OCPD) followed by avoidant personality then borderline personality disorders (Table 2). This result is similar to study result of Mary L. Kantojarvi, M. Joukamaa *et al*. [31]. cluster A diagnoses were infrequent, the most prevalent personality from cluster B were borderline personality disorders & from Cluster C were obsessive compulsive & avoidant personality disorders. But the result of this study opposite to the study result by M. Tracie and Shea *et al*. [32] most of the clients had more than one type of personality disorders.

Social problem solving has been conceptualized as composed of two process: Problem solving orientation & Problem solving styles. Problem solving orientation includes the person's awareness of problem, personal assessment of his/ her ability to solve the problems, & his/ her expectations about the effectiveness of problem solving attempts.

The present study result found that Negative Problem Orientation (NPO) domain had the highest mean score (121.9) (Table 3). This is similar to study result by Joseph Ciarrochi *et al*. [33] found evidence for significant increases in affect and negative problem orientation.

On the other hand, Positive Problem Orientation (PPO) and Problem Definition and Formulation (PDF) had the lowest mean scores.

There is statistically significant correlation among almost all domains of social problem solving which include Positive Problem Orientation (PPO), Negative Problem Orientation(NPO), Rational Problem Solving (RPS), Problem Definition and Formulation, Generation of alternative solutions, Decision Making, Solution Implementation and Verification, Impulsivity/ Careless Style and Avoidance Style (Table 4). This similar to Antoni Rodro Aguez-Fornells, Albert Maydeu-Olivares [18].

The domain of Negative Problem Orientation (NPO), which had statistically significant negative correlation (r=-0.27) with the Positive Problem Orientation (PPO), this similar to Kathleen Kara Fitzpatrick, Tracy K.Witte, Schmidt study results [34].

According to the present study there is a positive correlations between Negative Problem Orientation (NPO) with the domains of Impulsivity/ Carelessness Style (ICS) and Avoidance Style (AS). This is similar to Albert Maydeu-Olivares study result [35]. On the other hand, the correlation between Rational Problem Solving (RPS) with its subtypes [30].

The number of psychological disorders is a negative predictor for total score of social problem solving. This is similar to the results of the study by D'Zurilla, Thomas, Sheedy and Collette [36] that a hierarchical multiple regression analysis showed that general problem-solving ability was negatively related to later psychological stress, even after prior stress level and number of life problems were controlled. Also this is confirm by other study which describe depression and maltreatment were used to predict Social problem solving this study by Alitia. A. Levendosky, Alexandra Okun, Jeffrey G. Parker [37-38].

Generally speaking in reflective to this present study social problem solving was negatively correlated to personality disorder and specifically Paranoid, anxious & obsessive compulsive personality disorder were the highest negatively correlated with positive problem orientation.

CONCLUSION

This study concluded that the majority of personality disorders type among the study subjects was obsessive compulsive personality. However the Negative Problem Orientation (NPO) domain had the highest median & mean score, whereas the domains of Positive Problem Orientation (PPO) had the lowest median & mean score among study population.

Also, the total score of social problem solving were significantly lower in borderline personality disorder & other type of personality disorders compared to paranoid personality disorders.

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REFERENCES

1. Weidman, E., R. Jacobs, M. Reinecke, S. Silva and J. March, 2010. Social problem-solving among adolescents treated for depression. Behaviour Research and Therapy, 2; 48(2): 11-18.

2. Belzer, K., T. D'Zurilla and Olivares, 2002. Social problem solving and trait anxiety as predictors of worry in a college student population. Personality and Individual Differences. August, 9; 33(1): 573-585.

3. Gelder, M., P. Harrison and P.Cowen, 2007. Shorter Oxford Textbook of Psychiatry. Oxford University Press: United State of America, pp: 128-149.

4. The British Psychological Society. London. N. Alwin, R. Blackburn, K. Davidson, M. Hilton, C. Logan and J. Shine, 2006. Feb.available from: http://www.bps.org.uk/

5. Townsend, M., 2005. Essentials of Psychiatric Mental Health Nursing. 2nd ed edition. F.A. Davis Company: United State of America, pp: 451-475.

6. Shives, L., 2008. Basic Concepts of Psychiatric-Mental Health Nursing. 6th edition. Lippincott Williams & Wilkins: Philadelphia, pp: 335-352.

7. Freeman, S. and Rustagi, 2009. Women's mental health clinical guide primary care providers. Lippincott Williams & Wilkins: United State of America, pp: 226-262.

8. Townsend, M., 2005. Essentials of Psychiatric Mental Health Nursing. F.A. Davis Company: United State of America, pp: 445-467.

9. Michelson, S., 2009. The Relationship between Childhood Trauma, Personality Traits and Personality Disorders [PHD dissertation]. Chicago: Pro Quest LLC; 2009.

10. David, A., M. Phillips, J. Scherger and T. Johnson, 2003. Family Medicine: Principles and Practice. Springer Verlag New York, Inc: New York, pp: 188-189.

11. Poznanski, M. and P. Thagard, 2005. Changing personalities: towards realistic virtual characters. Journal of Experimental & Theoretical Artificial Intelligence., 17(3): 221-241.

12. Townsend, M., 2009. Psychiatric Mental Health Nursing Concepts of Care in Evidence-Based Practice. F.A. Davis Company: Philadelphia, pp: 666-692.

13. Sadock, B. and V. Sadock, 2008. Concise textbook of clinical psychiatry. 3rd edition. Lippincott Williams & Wilkins: New York, pp: 375-391.

14. Townsend, M., 2008. Nursing diagnosis in psychiatric nursing. 7th edition. F.A. Davis Company: Philadelphia, PA., pp: 1-35.

15. Reichman, W. and P. Katz, 2009. Psychiatry in Long-Term Care. Oxford University Press: New York, pp: 217-229.

16. American Psychiatric Association, 2000. Diagnostic and Statistical Manual of Mental Disorders. 4th edition. American Psychiatric Association: Washington, DC., pp: 685-729.

17. D'Zurilla, T., A. Nezu and A. Maydeu-Olivares, 2002. Social problem solving inventory-Revised (SPSI-R): Manual North Tonawanda, NY: Multi-Health system.

18. D'Zurilla and A. Maydeu-Olivares, 1995. Conceptual & Methodological issues in social problem solving assessment. Behavior Therapy, 26: 409-432.

19. D'Zurilla, T. and A. Nezu, 2007. Problem solving therapy: Appositive Approach to clinical intervention. 3rd edn. New York: springer publishing Co.

20. Rapp, R., 2009. The Back-translation Score: Automatic MT Evaluation at the Sentence Level without Reference Translations. University of Rovirai, Virgili. August, 4; 35(2): 133-136.

21. Sassa, M., M. Kohama and Y. Ito, 2004. Comparison and Evaluation of Back Translation Algorithms for Static Single Assignment Form. Tokyo Institute of Technology, 33(1): 197-210.

22. Berkanovic, E., 1980. The effect of inadequate language translation on Hispanics' responses to health surveys. American Journal of Public Health, 70(12): 1273-1276.

23. Abdel-khalek, A., 2003. Adequacy of an English version of the Kuwait university anxiety scale based on back translation and testing bilingual subjects. Psychological Reports, 93(2): 1101-1104.

24. Proudfoot, N. and M. Moore, 2009. Pre-mRNA Processing Reaches Back to Transcription and Ahead to Translation. University of Oxford. February, 20; 136(4): 688-700.

25. Txabarriaga, R., 2009. IMIA Guide on Medical Translation. International Medical Interpreters Association. January; 34(2): 2-20.

26. National Institute on Alcohol Abuse and Alcoholism. United state, 2004. Available from: http://www.niaaa. nih.gov/.

27. McMurran, M., V. Egan and M. Blair, 2001. The relationship between social problem-solving and personality in mentally disordered offenders. Personality and Individuals Differences., March, 1; 30(1): 517-524.

28. Stephen, M. Herrick and T. Elliott, 2001. Social problem-solving abilities and personality disorder characteristics among dual-diagnosed persons in substance abuse treatment. Journal of Clinical Psychology, Junuary, 57(1): 75-82.

29. McMurran, M. and M. Oaksford, 2010. Does social problem solving mediate the relationship between personality traits and personality disorders? An exploratory study with a sample of male prisoners. Personality and Mental Health June, 28; 4(1): 180-192.

30. DeMoor, R., 2010. The Moderating Effect of Personality Disorders on Violent Video Game Induced Hostility [Master thesis]. Pro Quest LLC. United State of America.

31. Kantojarvi, L., M. Joukamaa, J. Miettunen, K. Laksy, A. Herva, J. Karvonen Mary C. Zanarini, 2008. Childhood family structure and personality disorders in adulthood. US National Library of Medicine National Institutes of Health. May, 6; 23(3): 11-205.

32. Shea, T., R. Stout, J. Gunderson, L. Morey, C. Grilo, T. McGlashan and Andrew E. Skodol, 2002. Short-Term Diagnostic Stability of Schizotypal, Borderline, Avoidant and Obsessive-Compulsive Personality Disorders. Am. J. Psychiatry. December; 159(12): 2036-2041.

33. Ciarrochi, J., P. Leeson and P. Heaven, 2009. A Longitudinal Study Into the Interplay Between Problem Orientation and Adolescent Well-Being. Journal of Counseling Psychology, 56(3): 441-449.

34. Schultz, J., 2005. Lippincott's Manual of Psychiatric Nursing Care Plans. 7th edition. Lippincott Williams & Wilkins: Philadelphia, Baltimore, New York, London, Buenos, Hong Kong, Sydney & Tokyo, pp: 289-312.

35. Maydeu-Olivares, C. Albert Edward, D'Zurilla and J.S. Thomas, 2004. Social problem solving: Theory, Research and Training, pp: 11-27) Washington, DC, US: American Psychological Association, xvi, pp: 276.

36. D'Zurilla, T. and F. Sheedy, 1991. Relation between social problem solving ability and subsequent level of psychological stress in college student. Journal of Personality and Social Psychology. November; 61(5): 841-846.

37. Levendosky, A., A. Okun and J. Parker, 1995. Depression and maltreatment as predictors of social competence and social problem-solving skills in school- age children. Child abuse & Neglect. October; 19(10): 1183-1195.

38. Hayward, M. and P. Moran, 2008. Comorbidity of personality disorders and mental illnesses. Journal of psychiatry. March, 10; 7(3): 102-104.