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STUDY ON THE FACTORS RELATED TO THE MIDLIFE CRISIS IN MEN

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ABSTRACT

Midlife is an important milestone in life to which if a person not prepared and have insufficient sources of satisfaction, might be prone to psychological shock and might result in depression, feelings of failure in life, and sometimes severe psychiatric consequences. The aim of this study is to find the relevant causes of satisfaction or despair in this important stage of life, which would play role in determining the adequate mental health conditions. In this study, 200 Iranian men in their midlife age (45 to 65 years) were randomly selected and were required to fill questionnaire. The 28-question General Mental Health Questionnaire (GHQ-28) was also filled for all the subjects. From 200 male subjects, 49% were between the ages of 51 and 55 years and 43.5% had associate or bachelor degrees. According to GHQ-28, 132 men (66%) had no psychological problems while 68 (34%) had some problems. In sample with normal GHQ scores, the most important cause of satisfaction with life was satisfaction from their married life and spouse (97%) while the least relevant cause was their financial situation (81%). In the group with mental problems, only 20% were satisfied with their married life and spouse, and 28% with their financial situation. In the normal group 79% had the same cultural and social level as their wives, while this was seen in only 25% of people with mental problems. According to this study, satisfaction in the midlife age is related to factors that are shaped and established in the young age like marital, financial, and occupational status. To prevent midlife crisis, despair, depression, and other psychiatric consequences in this age, it seems important to prepare strategic and educational plans for the youth particularly about the proper selection of their way of life and their partner.

INTRODUCTION

Midlife crisis is a period of life that is more frequent between the ages 45 to 65 (Atkinson, 2001). Although the level of crisis in midlife varies in the various age groups, there was no clear rise of peak in concerns in any particular age group (Shek, 1996). Men (up to 80%) experience a psychological shock-like situation in this period of their life (Kalat, 1999; Schaies, 2001; Sadock, 2003). Depression, despair, substance abuse may occur, but often under-recognized and under treated (Samuels, 1997). Major depressive illness occurs in about 1 percent of elderly men, whereas minor depression or subsyndromal depression affects 13 to 27 percent of older men (Epperly, 2000). Severe mental illnesses may appear and might even lead to suicide in cases with physical illness (Gelder, 1989; Paladino, 1978). Suicide rates increase with age (Samuels, 1997).

Midlife may be associated with changes and losses, including declining health status, retirement, care giving for aging parents, and unexpected responsibility for adult children or grandchildren (Samuels, 1997). There are some explanations for midlife crisis. At this critical period, men review their past life and evaluate their achievements and failures. They will find the positive and negative aspects of their life and think about their future (Armond, 1999; Fisher, 1999)

Oles (1999) showed that the midlife crisis consists of three relatively independent dimensions extracted by factor analysis, namely, intensity of symptoms focused on changes in the self-concept, psychological maturity, and acceptance of time passing and death. This study has also showed that value crisis, coping mechanism, time orientation and lack of goals for the future, sense of time pressure, and some conscientiousness, introversion, and openness to experience may have an important role in developing midlife crises (Oles, 1999). In one study, Tikoo (1996) showed that there is no midlife crisis in India. Therefore, this problem may also have differential patterns based on cultural or racial background. Temperament type may have a role in midlife crisis event (Wankel, 1995). Kruger (1994) showed that only a small percentage of people high in neuroticism were prone to developmental crises.

Although midlife crisis is an important milestone in life, there is scant information regarding this period. To find preventive strategies for the midlife crisis, we designed this study to reveal the factors related to satisfaction or despair in this period of life.

METHOD

Sample

200 men participated in the study, 49% were between the ages of 51 and 55 and the most common level of education was an associate or bachelor degree (n=87) (Tables I and II).

Table I
Age distribution in the study group

Age (years)	40-45	46-50	51-55	56-60	61-65	Sum
Number	25	47	98	18	12	200
Percent	12.5	23.5	49	9	6	100

Table II
Educational level in the study group

Level of Education	Elementary	Junior high	High school	College/ bachelors	Masters degree	Doctorate	Sum
Number	8	15	52	87	18	20	200
Percent	4	7.5	26	43.5	9	10	100

Procedure

In this study, 200 men in midlife period were randomly selected from staffs that were working in Mashhad University. This study was approved by ethic committee of Mashhad University. We used the 28-question General Mental Health Questionnaire (GHQ-28; Goldberg et al., 2000) to screen mental health among participants. Demographic data regarding age, occupation and academic background, financial situation, living place, and also lifestyle, interpersonal relationship, ideological and religious beliefs, satisfaction during the young age and history of disability or chronic disorders were evaluated to find the importance of factors which may have a role in midlife crises. Specific information about marital life including number of children, marital satisfaction, and differences between ages, salary, socio-cultural, educational, occupational backgrounds with the spouse were also added to the questionnaire.

RESULTS

According to GHQ-28 test, 66% (n=132) of all subjects had no mental problem while 34% (n=68) had mental problems, including 8% with psychosomatic problems, 12% with anxiety, and 14% with depression. Among mental problems detected by GHQ-28 test, depressive symptoms were the most prevalent (Tables III and IV).

As demonstrated in Table V, among people with no mental problem according to GHQ test, 97% (the highest percentage) were satisfied with their married life and their wife, 88% were satisfied with their young age while only 20% and 23% of people with abnormal GHQ scores were satisfied in these fields. 93% of healthy people according to GHQ scores were satisfied with their lifestyle ideology, 91% with their occupation, 94% with their physical health and 97% with their spouse (Table V).

In all fields of life aspects assessed in our questionnaire, less than 50% of people for whom mental problems were detected in GHQ test were satisfied with their lives. The least satisfaction was for physical health (19%), spouse (20%), and young age life (23%). These people were mostly satisfied with their lives in the fields of lifestyle and social relationships (Table V).

Since marital satisfaction was suggested to be one of the most prominent factors relevant to subjects' satisfaction with their lives (as it was proven in the results), more questions about marital status were put in the questionnaire and the results for people with and without mental problems detected. Among people with no mental problem, 79% were in the same cultural level with their spouse, 76% in the same educational, and 68% the same economical level with their spouses. 71% had working spouses and 75% were 2 to 5 years older than their spouse, and 85% had 2 or less than 2 children. For people with mental problems in GHQ, 25% and 30% were in the same cultural and economical level with their wife respectively, and only 37% had working wives. Although most of these people had less than 3 children, the percentage of people with more than 3 children was more than 4 times as in the mentally healthy people. Finally, while most of people in both groups were 2 to 4 years older than their wives, in the mentally problematic people; percentage of people who were more than 8 years older than their spouses was as thrice as the normal group. The percentage of people younger than their wives was also twice as the normal group. This data is presented in Table VI.

Table III
Results of the GHQ test

	Number of respondents	Percentages
No problem	132	66
Psychosomatic complaints	16	8
Anxiety	24	12
Depression	28	14
Sum	200	100

Table IV
Relation of GHQ scores with the Educational level of participants

Level of Education	Elementary	Junior high	High school	College/ Bachelors	Masters degree	Doctorate	Sum
No problem	2	7	29	64	13	17	132
Psychosomatic complaints	2	2	4	6	1	1	16
Anxiety	3	1	8	9	2	1	24
Depression	1	5	11	8	2	1	28
Sum	8	15	52	87	18	20	200

Table V

Relationship between Factors affecting Satisfaction with Life and GHQ results

Satisfaction with	GHQ scores group				
	No problem	Psychosomatic	Anxiety	Depression	All the abnormal group
Young age	18%	31%	25%	17%	23%
Occupation / academic field of studies	91%	25%	50%	25%	33%
Life style	86%	18%	48%	23%	42%
Social relationships	84%	37%	66%	25%	42%
Ideology of life	93%	25%	54%	28%	36%
Spouse	97%	25%	29%	10%	20%
Location of residence	84%	42%	51%	14%	35%
Children	82%	18%	50%	7%	25%
Economical situation	81%	31%	48%	10%	28%
Physical health	94%	12%	37%	7%	19%

Table VI
Factors related to Marital situation in relation with GHQ scores

Factors		No problem	Abnormal GHQ results
Same educational background with spouse		70%	28%
Same socio-cultural background with spouse		79%	25%
Same economic background with spouse		68%	35%
Man older than woman	2-5 years	75%	62%
	6-8 years	15%	10%
	More than 8 years	6%	20%
Woman older than man		4%	8%
Number of children	0-2	85%	69%
	3	12%	18%
	More than 3	3%	13%
Working spouse		71%	37%

DISCUSSION

Although midlife crisis is an important mental health problem, there are few practical guidelines for its prevention and preparation of people to encounter this important milestone of life. It is of great importance to recognize, that changes must take place in one's inner values and that trying to escape into frenzied activities leads nowhere (Laemmel, 1991). As it is seen in our study, satisfaction with many life aspects that mostly are based in the young age like marital situation, occupation and academics, work place of life, and lifestyle, have great relevance with mental health in midlife. Among these variables, the most relevant one with mental health is marital satisfaction that is 97% in people with normal GHQ and 20% of people with detected mental problems. In one study, Krause showed the importance of sexual function in mental health of middle age. Impotence or a loss of sexuality is not a sequel of aging, but of attitude towards sexuality (Krause, 1994). Educational, cultural, and economical backgrounds also have an important role in satisfaction with the marital life (Table VI).

There also seems that although most of people in our study were 2 to 5 years older than their wives, a considerable difference in age or the older age of wife is relevant with less satisfaction with marital situation in the midlife.

Finally, interestingly most of people, who were satisfied with their marital lives, had working wives. This might be related to better economical level of the family or a sense of well being in working spouses (Table VI). Although in both groups, the number of children was less than 3, the percentage of people with more than 3 children in mental health problems group was as thrice as the healthy group (Table VI). It might be related to the burden put on parents due to more number of children.

According to our study, some of the most important factors affecting peoples' satisfaction in their midlife are their ideology in life, life style, spouse, occupation and academic field of practice. If people are educated and guided in their young age about these issues and they are helped to chose their life pathway academically, occupationally, and ideologically based on their mental and physical talents, abilities, and interests, and also are guided to choose their partners correctly, they will have a better situation in midlife and they will rarely encounter the severe mental consequences of a midlife crisis and can pass this stage of life more successfully. It would also be helpful for men to be more productive, mentally healthy and will promote their pathway of self-actualization and individuation. But if these factors are neglected at a young age and people are not guided in these fields, there might be midlife crises with mental disorders and even irreversible psychiatric illnesses. It has great importance for any health systems to have long-term programs and strategies for education of the youth for making better selection in their pathway of life to have healthier and more productive midlife.

REFERENCES

Armond, N. (1999). The Harvard Guide to Psychiatry (3rd ed), Harvard University Press, 638-641.

Atkinson, R. (2001). Introduction to Psychology, Persian translation, Vol. 1, Roshd Pub, Tehran, 206-214.

Epperly, T.D., & Moore, K.E. (2000). Health issues in men: Part II. Common psychosocial disorders. American Fam Phisition , 62:117-124.

Fisher, J.E. (1999). Comprehensive Handbook of Psychopathology (2nd ed). Plenum Press. 815-825.

Gelder, M. (1989). Oxford Textbook of Psychiatry (2nd ed). Oxford University Press, 595-600.

Goldberg, D.P., Hiller, B.F., Gallo, J.J., Fulmer, T., Paveza, G.J. & Reichel,W. (2000). Scaled US verion of the General Health Questionnaire. Handbook of Geriatric Assessment (2nd ed). Rockville, Md.; Aspen Publishers (MMYB notes, 5/2005). Pp 76-78.

Kalat, J.W. (1999). Introduction to Psychology (5th ed). Wadsworth Pub, Belmont, 377-378.

Krause, W. (1994). Do we need the concept of male climacteric? Fortschr Med, 113:32-40

Kruger, A. (1994). The midlife transition: crisis or chimera. Psychol Rep, 75:1299-1305

Lacmmel, K. (1991) Midlife crisis: crisis in the middle of life; Schweiz Rundsch Med Prax, 80:1446-1451.

Oles, P.K. (1999). Towards a psychological model of midlife crisis. Psychol Rep, 84:1059-1069.

Paladino, J. (1997). Psychology (2nd ed). Simon and Schuster Pub, NJ, 452-453.

Sadock, B.J., & Sadock, V. (2003). Synopsis of Psychiatry (9th ed). LWW, 47-48.

Samuels, S.C. (1997). Midlife crisis: helping patients cope with stress, anxiety, and depression Geriatric, 52-63.

Schaies, W. (2001). Introduction to Psychology, Persian translation, Vol. 1, Roshd Pub, Tehran, 207-214.

Shek, D.T. (1996). Midlife crisis in Chinese men and women. J Psychol ,130:109-119.

Tikoo, M. (1996). An exploratory study of differences in developmental concerns of middle-aged men and women in India. Psychol Rep, 78: 883-887.

Waskel, A.S. (1995). Temperament types: midlife death concerns, demographics, and intensity of crisis. J Psychol, 129: 221-233.

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PERCEIVED EMOTIONAL EXPRESSION IN THE FAMILY AND PSYCHOPATHOLOGY

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ABSTRACT

The Present study aims to determine the difference in the perception about one's family environment, between schizophrenic individuals and their normal counterparts. Literature review pointed out towards the importance of expressed emotions as the major ingredient related to the family, which would strongly relate to the psychopathology. To study the phenomenon in Pakistani culture the subscale of Affective expression extracted from Family Assessment Measure; Version III (FAM III; Skinner et al., 1995) was administered on the sample of 100 individuals of ages 25 to 40 years, with at least intermediate education. Fifty of them were schizophrenics and rests are the normal individuals. Statistical application 'student's' test in order to obtain the difference between the two groups. Results suggest significant difference between the two groups, with schizophrenic being reported family environment as high in expression of feelings (t= 7.135, df= 98, p< .000).

INTRODUCTION

Evidences indicate that emotional qualities of the family environment are significant prospective predictor of various psychiatric disorders even for those disorders for which genetic and other biological variables provide powerful etiological explanations. The family attributes have been conceptualized as generalized stressors that in conjunction with other biological and social factors overwhelm a biologically vulnerable family member and contribute to his or her disorder (Nuechterlein & Dawson, 1984; Zubin & Spring, 1977). Wynne et al. (1987) also consider family as the most important participant in the development of pathology.

The major part of primary etiology is associated with a certain type of negative communication called expressed emotions directed at the patient by family members (Hooley, 1985; Milkowitz, Goldstein & Falcon, 1983; Vaughn & Leff, 1976; 1981). Two components appear critical in the pathogenic effects of expressed emotions, i.e., emotional over involvement (as shown by excessive protectiveness and intrusive expressions of concern) with the patient and criticalness (an expression of hostility). Goldstein (1987) found negative interaction in emotional manners and communication deviance as a characteristic in families of schizophrenics. Day (1986) argued that it is possible to identify at least four types of persistently toxic environment, the cognitively confusing, the emotionally intrusive, the overtly demanding and threatening or demoralizing physical environment.

Therapists working with families who had an identified member with schizophrenia noted unclear, confusing & conflicting communication patterns in family sessions (Bateson, Jackson, Haley & Weakland, 1981; Haley, 1981; Schaffer, Wynne, Day, Ryckoff, & Halperin, 1962). Brady and McCain (2004) discussed that these patterns were viewed as reflecting dysfunctional family structures and relationships, and were thought to contribute to the development and persistence of schizophrenia-associated symptoms in the ill family member. In addition to unclear and ambiguous communication, these families were perceived to have a culture of shared denial of feelings and to be overly involved or "enmeshed" with each other.

As evident by above-mentioned literature, emotionally intrusive environment created by living with high emotionally expressive relative, might be stressful because it is cognitively confusing. However, among many studies, which are in favor of emotional expression as the major ingredient of disturbed family environment, there are few good quality studies which have failed to do so (e.g. MacMillan et al., 1986; 1987). However most studies found evidence in favor that concepts such as Expressed Emotion (EE) (Brown, Birley & Wing, 1972; Vaughn & Leff, 1976); Affective Style (Doane, West, Goldstein, Rodnick & Jones, 1981) were proposed to represent characteristics of deviant family emotional climate.

Besides the well-established findings of high expression of emotions having negative effects, the cross-cultural validity of EE has been examined in a few non-Western cultures, with controversial findings. The original concept of EE includes a set of positive and negative emotions, among which three major

negative components — criticism, hostility and emotional over-involvement, have become the focus of research in both Western and non-Western countries. It has been pointed out, however, that what counts as criticism, hostility and emotional over involvement is a matter of cultural definition (Jenkins & Karno, 1992).

Unlike the Western family, which stressed the autonomy and independence of children, Lin and Lin (1980) observed Chinese families in which children's obedience and acceptance of parents' criticism, and interdependence between generations, are encouraged. The sick role played by a Chinese person with schizophrenia and the family's response has certain epic characteristics. It is therefore likely that the norms of various components of EE among Chinese relatives of patients with schizophrenia, and perhaps also among relatives in other cultures dominated by extended families (El- Islam, 1982), are considerably different from those among their Western counterparts.

Thus, it would be interesting and useful to observe these patterns in the Pakistani culture and to differentiate them to the existed usual patterns in a family with no psychiatric member.

METHOD

Sample

Sample of the present research includes 100 participants. Fifty participants were the diagnosed and registered patients of various psychiatric hospitals; the rests were their normal counterparts. The diagnoses were confirmed by respective psychologist and a detailed interview intending to reach the diagnosis according to DSM IV -TR classification of Schizophrenia. All the participant in the clinical group, as well as normal group were 25 to 40 years old, single males with at least education of intermediate.

Measure

The subscale of Affective Expression adapted from Family Assessment Measure, Version III (FAM III; Skinner et al., 1995) was administered. Affective expression includes the content, intensity, and timing of the feelings involved.

Procedure

The subjects were approached at various psychiatric out patient settings and were selected according to the clinical interview, diagnoses made by their

respective physicians, and clinical psychologist. After the screening, they were required to complete a demographic form and afterwards the FAM III was administered. The control population includes the volunteers selected from community who are in the same age range as their psychiatric counterparts, with minimum of intermediate education and screened out for psychiatric personal/ family history.

RESULTS

Table I
Difference in the Perceived Level of Affective Expression in Family between Schizophrenic and their Normal counterparts

Groups	Mean	St. Dev	F	Sig	t	df	Sig
Schizophrenia	10.0000	2.4612	3.109	.081	7.135	98	.000
Controls	5.7400	2.1825					

DISCUSSION

Results reveal that schizophrenic scored high on the scale of expressed emotions as compared to their normal counterparts (t= 7.135, df= 98, p< .000). Besides the well established findings related to the differential patterns of family functioning in the non western countries, findings suggest presence of deviant environment in the family of schizophrenics as compared to the usual families in Pakistan.

Besides the fact that western standards for expression and involvement seem not valid in Pakistan, results however, appears consistent with the findings in the western culture. A major issue to be addressed is the inclusion of both joint and nuclear family structure in the sample. The family structure might play a role and need to be controlled in the future research.

Lin and Lin (1980) as cited earlier found major differences in Chinese families as compared to western countries, which is due to differential family practices in the two cultures. Pakistan is also supposed to be a society where

family bonds are very strong and children are supposed to live with parents not only before marriage but even after the marriage. However it seems that besides, the differential patterns, schizophrenic still found their family as more expressive of intense feelings. Further study exploring the cross cultural differences seems essential to fully address the issue.

However, the importance of family is well depicted in this study. Family life is our first school for emotional learning. This emotional schooling operates not just through the things that parents say and do directly to children, but also in the models they offer for handling their own feelings and those that pass between husband and wife. How parents treat their children, whether with harsh discipline or empathic understanding, with indifference or warmth and so on, has deep and lasting consequences for the child's emotional life (Goleman, 1995). Active understanding and shaping of family environment according to the needs of children would be fruitful in developing a person with healthy life style.

REFERENCES

Bateson, G., Jackson, D. D., Haley, J., & Weakland, J. H. (1981). Toward a theory of schizophrenia. In R. J. Green & J.L. Framo (Eds.), Family therapy: Major contributions (pp. 41-68). New York: International Universities Press, Inc. In Brady, N., McCain, G. (2004). Psychiatric / Mental Health Nursing- " Living with Schizophrenia: A family perspective" Online Journal of Issues in Nursing. Vol. 10(1). http://nursingworld.org/ojin/hirsh/topic4/tpc4_2.htm

Brady, N., & McCain, G. (2004). Psychiatric / Mental Health Nursing- " Living with Schizophrenia: A family perspective" Online Journal of Issues in Nursing. Vol. 10(1). http://nursingworld.org/ojin/hirsh/topic4/tpc4_2.htm

Brown, G. W., Birley, J. L. & Wing, J. K. (1972). Influence of family life on the course of schizophrenic disorders: a replication. British Journal of Psychiatry, 121, 241-258.

Cheng, A.T.A. (2002). Expressed emotion: a cross-culturally valid concept. The British Journal of Psychiatry, 181, 466-467.

Cheng, A. T. A., Tien, A. Y., & Chang, C. J., et al (2001). Cross-cultural implementation of a Chinese version of the Schedules for Clinical Assessment in Neuropsychiatry (SCAN) in Taiwan. British Journal of Psychiatry, 178, 567-572.

Day, R. (1986). Social stress and schizophrenia: from the concept of recent life events to the notions of toxic environments .In Bebbington, P. &McGuffin, P. (1988). Schizophrenia: The major issues. Heinemann Professional. London.

Doane, J. A., West, K. L., Goldstein, M. J., Rodnick, E. H., & Jones, J. E. (1981). Parental communication deviance and affective style. Predictors of subsequent schizophrenia spectrum disorders in vulnerable adolescents. Archives of General Psychiatry, 38, 679-685.

El-Islam, M. F. (1982). Rehabilitation of schizophrenics by the extended family. In Cheng, A.T.A. (2002) Expressed emotion: a cross-culturally valid concept. The British Journal of Psychiatry, 181, 466-467.

Goleman, D. (1995). Emotional Intelligence. Bantam. NY.

Haley, J. (1981). The family of the schizophrenic: A model system. In Green, R. J. & Framo, J. L. (Eds.). Family therapy: Major contributions. 70-104. New York: International Universities Press, Inc.

Hooley, J. M. (1985). Expressed emotions: A review of the critical literature. In Carson, R.C., Butcher, J.N., Mineka, S. (1998).Abnormal Psychology and Modern Life. (10th ed).Addison Wesley Education. NY.

Jenkins, J. H. & Karno, M. (1992). The meaning of expressed emotion: theoretical issues raised by cross-cultural research. In Cheng, A.T.A. (2002) Expressed emotion: a cross-culturally valid concept. The British Journal of Psychiatry, 181, 466-467.

Lin, T. Y. & Lin, M. C. (1980). Love, denial and rejection: responses of Chinese families to mental illness. In Kleinman, A. & Lin, T.Y. (eds), Normal and Abnormal Behavior in Chinese Culture, 387-401. Boston, MA: D. Reidel.

MacMillan, J. F., Gold, A., & Crow, T. J., et al (1986). The Northwick Park study of first episodes of schizophrenia. IV. Expressed emotion and relapse. In Cheng, A.T.A. (2002) Expressed emotion: a cross-culturally valid concept. The British Journal of Psychiatry, 181, 466-467.

MacMillan, J. F., Crow, T. J., & Johnson, A. L., et al (1987). Expressed emotion and relapse in first episodes of schizophrenia. In Cheng, A.T.A. (2002) Expressed emotion: a cross-culturally valid concept. The British Journal of Psychiatry,181, 466-467.

Milkowitz, D.J., Goldstein, M.J., & Falcon, I.R. (1983). Premorbid and symptomatic characteristics of schizophrenics from families with high and low level of expressed emotion. In Carson, R. C., Butcher, J. N., Mineka, S. (1998).Abnormal Psychology and Modern Life. (10th ed). Addison Wesley Education.NY.

Nuechterlein, K.H. & Dawson, M.E. (1984). A humanistic Vulnerability / stress model of schizophrenic episodes. In Milkowitz, D.J., Goldstein, M.J. & Nuechterlein, K.H. (1993). Verbal interaction in the families of schizophrenic and bipolar affective patients. Journal of Abnormal Psychology,104(2),268-276.

Schaffer, L., Wynne, L.C., Day, J., Ryckoff, I. M., & Halperin, A. (1962). On the nature and sources of the psychiatrist's experience with the family of the schizophrenic. Psychiatry, 25, 32-45.

Skinner, H. A., Steinhauer, P. D., & Santa- Barbara, J. (1995). Family Assessment Measure- Version III (FAM-III) – Technical Manual. Published by Multi-Health Systems, Inc.

Vaughn, C.E. & Leff, J.P. (1976). The influence of family and other social factors on the course of psychiatric illness: A comparison of depressed, neurotic and schizophrenic patients. In Carson, R.C., Butcher, J.N., & Mineka, S. (1998). Abnormal Psychology and Modern Life. (10th ed). Addison Wesley Education. NY.

Vaughn, C. E. & Leff, J. (1976). The measurement of expressed emotion in the families of psychiatric patients. British Journal of Social and Clinical Psychology, 15, 157-165.

Wynne, L.C., Cole, R.E. & Perkins, P. (1987). University of Rochester child and family study: Risk Research in progress. In Nevid, J.S., Rathus, S.A. & Greun, B.(1997).Abnormal psychology in a changing world(3rd ed) .Prentice Hall. USA.

Zubin, J. & Spring, B. (1977). Vulnerability – A new view of schizophrenia. In Milkowitz, D.J., Goldstein, M.J. & Nuechterlein, K.H. (1995). Verbal interaction in the families of schizophrenic and bipolar affective patients. Journal of Abnormal Psychology, 104 (2), 268-276.

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STIGMA ASSOCIATED WITH MENTAL ILLNESS

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ABSTRACT

This study was done in order to know the perceived impact of stigma on psychologically ill patients. The views of 114 psychiatric outpatients and day-patients and 20 mental health workers concerning stigma were sought. A fair proportion of patients with schizophrenia or depression perceived that stigma had a negative effect on their self-esteem, relationships and job opportunities. The majority felt a need for an increase in public awareness of mental illness. The diagnostic label of mental illness may render the person vulnerable to stigmatization. Possible causes of stigma and ways of reducing stigma are discussed.

INTRODUCTION

The diagnosis of mental illness comes with the additional burden of a negative label. Reviews of the literature suggest that the community reacts adversely towards the mentally ill (Link et al., 1987). Mental illness has traditionally been surrounded by community misunderstanding, fear, and stigma. Stigmatization of people with mental disorders has persisted throughout history. It is manifested by bias, distrust, stereotyping, fear, embarrassment, anger, and/ or avoidance. Stigma leads others to avoid living, socializing or working with, renting to, or employing people with mental disorders, especially severe disorders such as schizophrenia (Penn & Martin, 1998; Corrigan & Penn, 1999).

Stigma towards people with a mental illness has a detrimental effect on their ability to obtain services, their recovery, the type of treatment and support they receive, and their acceptance in the community that in turn may lead to low self-esteem, isolation, and hopelessness (Hocking, 2003). Mann and Himelein (2004), in a survey of 116 undergraduates examined the impact of diagnosis, attitudes about treatment, and psychiatric terminology on stigma associated with

mental illness. Stigmatization of schizophrenia was significantly higher than stigmatization of depression. More positive attitudes toward treatment were associated with significantly less stigma. However, psychiatric terminology had no impact on attitudes toward mental illness. Significantly less stigmatization of mental illness was found among females than among males. Research on stigma has attempted to throw light on the various components of the process. Much of our knowledge on stigma comes from attitudes and beliefs about mental illness among the public. Attitude surveys have illustrated the type of characteristics associated with mental illness (Raingruber, 2002). Angermeyer and Matschinger (2003) in his study provided an overview of ways to which mentally ill people are exposed to stigmatization that has fatal effect on their social relationship, their working situation, and their quality of life. Of all mental illnesses, schizophrenia appears to be the most stigmatized disorder. While depression, anxiety disorders and eating disorders have seen an increasing public interest, schizophrenia remains associated with negative stereotypes such as violence and dangerousness (Angermeyer & Schulze, 2001).

Recent studies have shown that large-scale public education campaign on mental illness and the increasing integration of psychiatric services in the community have done little to alter the stigma associated with mental disorders (Phelan & Link, 1998). A study on perception of stigma among family members of individuals in rural societies concluded that seventy five percent respondents perceived that they were stigmatized or had experienced some sort of stigma due to the presence of mental illness in the family. Finding revealed that considerable concern about stigma exist among families with mentally ill relatives and that substantial numbers of family members experience the stigma of mental illness in one form or another and perceive that their ill relatives experience it as well (Shibre et al., 2001).

Assessing whether those with mental illness are aware of the presence of negative attitudes in the population, Link, et al. (1987) investigated patients' responses to their stigmatized status. Here, they found that those who perceived more devaluation and discrimination on the part of the public towards the mentally ill were more likely to apply strategies such as secrecy and withdrawal in order to avoid negative reactions. In another study respondent reported having witnessed stigmatizing comments or depictions of mental illness, having been treated as less competent by others being shunned and being advised to lower their expectations in life once their illness was known. Stigmatization affects employability (Link, 1982) and social acceptability too (Piner & Kahle, 1984).

This study sought to survey the perceived impact of stigma on psychiatric patients as well as their views on what they saw as contributing to the stigma of mental illness. We also obtained additional information on the level of awareness.

METHOD

Sample

One hundred and fourteen psychiatric patients participated in the study. They were either outpatients attending the psychiatric outpatient clinic at the Isra University Hospital or patients coming to the private clinic at Hyderabad. Other study group, consisting of twenty mental health workers, was also surveyed. They were working as psychiatrists or psychologist either in the Hospital or in the private clinics.

Procedure

A self-administered questionnaire was designed to elicit the patients' opinions on different forms of social discrimination and rejection. Questions fell into one of several categories. First of all, there were several questions asking subjects about the possible effects of stigma on self-esteem, relationships, and job opportunities. Next, subjects were asked to indicate reason for delayed consultation. Finally, subjects were requested to give their opinions on whether the mass media portrayed mental illness negatively. Verbal consent was taken before the administration of the questionnaire.

A second questionnaire was designed to clarify the stigma attached to mental health workers. The respondents were asked if their line of work had been laughed at, whether they had been discouraged from joining the mental health profession, and whether they would choose the same career again.

RESULTS

Table I
Characteristics of Psychiatric Patients

Marital Status	Percentages
Married	61%
Widow	07%
Single	33%
Education	
Postgraduate	9%
Graduate	13%
Intermediate	13%
Matric	7%
Secondary	21%
Illiterate	37%

Majority (61%) was married and most of the respondents (37%) were illiterate.

Table II
Reason for delayed consultation

Questionnaire Item	Frequency and Percentage of patients with schizophrenia answering affirmatively	Frequency and Percentage of patients with depression answering affirmatively
Lack of Awareness	22 (54%)	48 (66%)
Feel ashamed	9 (22%)	14 (19%)
Family discouraged	7 (17%)	8 (0.1%)
Never thought	3 (0.1%)	3 (0.04%)

Table II shows the patient's reason for delayed consultation for their problems. Most often reported was lack of awareness.

Table III
Perceived Impact of Stigma on Psychiatric Patients

Questionnaire Item	Percentage of patients with schizophrenia answering affirmatively	Percentage of patients with depression answering affirmatively
Lowered self-esteem	52%	57%
Feel ashamed of illness	47%	33%
Expectation of social rejection	51%	38%
Difficulty in getting a job	73%	44%
Irritation	40%	10%

Table III summarizes responses to items concerning the specific perceived impact of stigma on psychiatric patients.

Among patients with schizophrenia, the negative impact of stigma most often cited was difficulty in getting a job (73%). In addition, 52% of patients with schizophrenia thought less of themselves because of their illness; 47% felt ashamed of their illness. 51% of them thought that neighbors and colleagues would avoid them if they knew of their illness. Among patients with depression, lowered self-esteem (57%) and difficulties in getting a job (44%) were cited as significant problems.

Table IV
Perceived Contribution by Mass Media to Mental Illness Stigma

Questionnaire Item "Do you think that the Mass media give a negative Image of mental illness?"	Percentage of patients with schizophrenia answering affirmatively	Percentage of patients with depression answering affirmatively
Television	44%	36%
Newspapers	46%	22%
Radio	36%	17%

Table IV shows the concern of psychiatric patients that the mass media may give a negative portrayal of mental illness.

Eighty percent of the patients watched television, 68% of the patients read the newspaper and 53% of them listened to the radio. They saw stigma as coming from television programmes, newspaper reports and jokes on the radio. Some were concerned that the mentally ill were stereotyped as violent and dangerous, or different and laughable. Proportionately more patients with schizophrenia viewed the various mass media as contributing to stigma, than patients with depression.

Table V
Stigma associated with the Mental Health Profession

Questionnaire Item	Percentage of Psychologist responding affirmatively	Percentage of Psychiatrists responding affirmatively
Laughed at for working with psychiatric patients	65%	60%
Discouraged by family from joining profession	31%	29%
Choose the profession again	51%	30%

Table V shows the societal responses encountered by mental health workers. Around 60% of psychiatrist and 65% of psychologist reported that others had laughed at their line of work. About 29% psychiatrists and 31% psychologists had been discouraged by family members from joining the mental health profession. In response to the questionnaire item on whether they would choose the same profession again, 51% of psychologist and 30% of psychiatrists indicated that they would make a different choice.

Characteristics of Respondents

Psychiatric Patients

There were 63 women (55%) and 51 men (44%). Among the respondents, the two largest groups suffering from depression (64%), and schizophrenia (36%) were taken. There were 72 respondents (63%) from rural area and 42 respondents (37%) from urban area. The largest group of respondents (25%) was in the 25-30 year-old age range.

Mental Health Workers

The majority of the respondents (80%) were female. There were 08 psychologist and 12 psychiatrists. Most of the workers were in the 28-34 and 35-45 year-old age range.

DISCUSSION

Stigma associated with mental illness is a well-known factor leading to varied complications. This is an important problem, which needs immediate attention of social scientist. Stigma associated with mental illness and psychiatric treatment and the discrimination toward people with mental illnesses resulting from this stigma are main obstacles preventing early and successful treatment (Lai et al., 2000). To reduce such stigma and discrimination, especially toward people with schizophrenia, the awareness raising program needs to be implemented throughout the country. Stigma not only victimizes mentally ill patients but may involve the family and community to whom they belong such as race or ethnic group (Corrigan et al., 2003).

In addition to the psychological perspective, researchers have also focused on the symbolic associations of medical labels and media images. Phillips (1990) said that society views disabled persons as damaged, defective, and less socially marketable than non-disabled persons. Furthermore, she argued that this perception of damaged goods is part of a process where medical labels assign a particular social status to a particular disease. Media portrayals are of great interest to researchers because they reflect and perpetuate stereotypical ways of thinking about disabled people. One series of surveys found that selective media reporting reinforced the public's stereotypes linking violence and mental illness and encouraged people to distance themselves from those with mental disorders (Angermeyer & Matschinger, 1996).

Research into the social encounters between normal and disabled people shows that, normal people often feel uncomfortable and uncertain when interacting with persons who are disabled. Goffman (1963) contended that normal people experience ambivalent feelings towards stigmatized individuals and seek to avoid having stigma spread to them by avoiding close association with a disabled person. It is important to note that although disabled people know of their stigma, they can refuse to internalize the negative societal attitudes towards them in their self-evaluations. Goffman observed that stigma bearers are often unable to successfully challenge imputations of negative difference in part

because they themselves accept the premises and values, which underlie their discredited social identities.

In taking a closer look at the problem of stigma in mental illness, it becomes clearer that there are many layers to the issue. The stigma associated with schizophrenia is pervasive, both in the community and among healthcare workers, and forms a real barrier to optimal recovery from the illness. The negative consequences of stigma include discrimination in housing, education and employment, and increased feelings of hopelessness in people with schizophrenia (Hocking, 2003).

In this study, it is highly interesting to note that the stigma appears to stem from the psychiatric label and not the presence of a chronic illness per se. So improving community attitudes by increasing knowledge and understanding about mental illness is essential if people with a mental illness are to live in, and contribute to the community, free from stigma and discrimination. But it is not only people with a mental illness who experience discriminations and stigma. Rejection of people with mental illness inevitably spills over to the caregiver and family members.

An important component of efforts to reduce stigma would be the dissemination of basic knowledge about mental illness to the general population. Research suggests that individuals who have more information about mental illness are less prejudiced against the mentally ill (Roman et al., 1981; Link & Cullen, 1986; Brockington et al., 1993). For instance, sharing facts about the relationship between violent behavior and acute relapses may allay fears that the mentally ill patient can be violent at any time. The mass media would be extremely helpful as a means of educating the public about the realities and myths of mental illness. Newspapers could perhaps feature excerpts from memoirs of those who have written about their personal experiences of mental illness.

This is a pilot study on the stigma of mental illness. Further studies could expand on the areas of stigmatization effects, the relationship between the severity of illness and the perception of stigma and the difference between the stigma of mental illness and that of physical illness. It would also be useful to get the public to articulate their beliefs and fears of mental illness, so that specific information could be provided to reduce negative beliefs about mental illness.

There is a possibility that some patients share negative societal attitudes towards the mentally ill and stigmatize themselves when they are diagnosed with mental illness. Mental health professionals may wish to address this issue directly with mentally ill persons to help them challenge their distorted views of themselves. Nearly two-thirds of all people with diagnosable mental disorders do not seek treatment (Regier et al., 1993; Kessler et al., 1996). Stigma surrounding the receipt of mental health treatment is among the many barriers that discourage people from seeking treatment (Sussman et al., 1987; Cooper-Patrick et al., 1997). Concern about stigma appears to be heightened in rural areas in relation to larger towns or cities (Hoyt et al., 1997).

Another manifestation of stigma is reflected in the public's reluctance to pay for mental health services. Members of the public report a greater willingness to pay for insurance coverage for individuals with severe mental disorders, such as schizophrenia and depression, rather than for less severe conditions such as worry and unhappiness (Hanson, 1998).

Knowledge of mental illness appears by itself insufficient to dispel stigma (Phelan et al., 1997). Broader knowledge may be warranted, especially to redress public fears. Research is beginning to demonstrate that negative perceptions about severe mental illness can be lowered by furnishing empirically based information on the association between violence and severe mental illness (Penn & Martin, 1998). Overall approaches to stigma reduction involve programs of advocacy, public education, and contact with persons with mental illness through schools and other societal institutions (Corrigan & Penn, 1999; Gaebel & Baumann, 2003).

Limitation of the Study

Several limitations of our survey are immediately apparent. The first limitation is that this study has not actually measured the severity of illness to see if there is a relationship with the perception of stigma.

Secondly, in the course of the survey, found that questionnaire items did not cover the more subtle ramifications of stigma. The questionnaire item phrased social rejection in terms of being avoided by others. The patients, however, experienced stigma in other ways. They reported that people treated them differently, in a condescending manner that diminished their personhood, or ignoring them and making them feel devalued.

Finally, the questionnaire item on low self-esteem did not distinguish between the actual experience of stigma and the patient's own fears of stigma. It is possible that the patients themselves have their own views of mental illness and they project their ideas and feelings of diminished self-esteem onto the society.

CONCLUSION

Although the stigma of mental illness is a well known and much discussed fact, it has so far not really been included in the professional knowledge base. It is still practically absent from discussions of quality of care. In order for services to be relevant to people who need them, professional can no longer ignore issues that are of major importance for users. Stigma must thus be included in the conceptual thinking about serving people with mental illness. However, the meaning of mental illness is a social, and therefore changeable construct. Adequate information may demystify mental illness and help to reduce the fear and prejudice surrounding it. Our findings illustrate the need of reducing the stigmatization of mental illness that continues to be an important goal for mental health professionals.

REFERENCES

Angermeyer, M. C., & Matschinger, H. (1996). The effect of violent attacks by schizophrenic persons on the attitude of the public towards the mentally ill. Social Sciencehfedicine, 43, 1721-1728.

Angermeyer, M.C., & Matschinger, H. (2003). Public beliefs about schizophrenia and depression: similarities and differences. Soc Psychiatry Epidemiol. Sep; 38(9), 526-34.

Angermeyer, M.C., & Schulze, B. (2001). Reducing the stigma of schizophrenia: Understanding the process and options for interventions. Epidemiol Psichiatr Soc, 10(1), 1-7

Brockington, I.F., Hall, P., Levings, J., & Murphy, C. (1993). The community's tolerance of the mentally ill. British Journal of Psychiatry, 162, 93.

Cooper-Patrick, L., Powe, N. R., Jenckes, M. W., Gonzales, J. J., Levine, D. M., & Ford, D. E. (1997). Identification of patient attitudes and preferences regarding treatment of depression. Journal of General Internal Medicine, 12, 431–438.

Corrigan, P. W. & Penn, D. L. (1999). Lessons from social psychology on discrediting psychiatric stigma. American Psychologist, 54, 765–776.

Corrigan, P., Thompson, V., Lambert, D., Sangster, Y., Noel, J.G., & Campbell, J. (2003). Perceptions of discrimination among persons with serious mental illness. Psychiatric Services, Aug; 54(8), 1105-10.

Gaebel, W., & Baumann, A.E. (2003). Interventions to reduce the stigma associated with severe mental illness: experiences from the open the doors program in Germany. Can J Psychiatry, Nov; 48(10), 657-62.

Goffman, E. (1963). Stigma: Notes on the Management of Spoiled identity. Prentice-Hall, Englewood Cliffs, NJ.

Hanson, K. W. (1998). Public opinion and the mental health parity debate: Lessons from the survey literature. Psychiatric Services, 49, 1059–1066.

Hocking, B. (2003). Reducing mental illness stigma and discrimination - everybody's business. Med J Aust, May 5; 178 Suppl: S47-8.

Hoyt, D. R., Conger, R. D., Valde, J. G., & Weihs, K. (1997). Psychological distress and help seeking in rural America. American Journal of Community Psychology, 25,449–470

Kessler, R. C., Nelson, C. B., McKinagle, K. A., Edlund, M. J., Frank, R. G., & Leaf, P. J. (1996). The epidemiology of co-occurring addictive and mental disorders: implications for prevention and service utilization. American Journal of Orthopsychiatry, 66, 17–31.

Lai, Y. M., Hong, C. P. H., & Chee, C. Y. I. (2000). Stigma of Mental Illness. Singapore Med J, 42(3), 111-114

Levitin, T.A. (1975). Deviants as active participants in the labeling process: the visibly handicapped. Soc. Problems; 24, 548-57.

Link, B.G., Cullen, F.T., Frank, J., & Wozniak, J.F. (1987). The social rejection of former mental patients: Understanding why labels matter. American Journal of Sociology, 92, 1461-500.

Link, B. G. (1982). Mental patient status, work, and income: An examination of the effects of a psychiatric label. American Sociological Review, 47, 202-15.

Link, B. G., & Cullen, F.T. (1986). Contact with the mentally ill and perceptions of how dangerous they are. Journal of Health and Social Behaviour, 27, 289-303.

Mann, C.E., & Himelein, M.J. (2004). Factors associated with stigmatization of persons with mental illness. Psychiatr Serv, Feb; 55(2), 185-7.

Penn, D. L., & Martin, J. (1998). The stigma of severe mental illness: Some potential solutions for a recalcitrant problem. Psychiatric Quarterly, 69, 235–247.

Phelan, J. C., & Link, B. G. (1998). The growing belief that people with mental illnesses are violent: The role of the dangerousness criterion for clinical commitment. Social Psychiatry and Psychiatric Epidemiology, 33, 7-12.

Phelan, J., Link, B., Stueve, A., & Pescosolido, B. (1997). Public conceptions of mental illness in 1950 in 1996: Has sophistication increased? Has stigma declined? Paper presented at the meeting of the American Sociological Association, Toronto.

Phillips, M.J. (1990). Damaged goods: oral narratives of the experience of disability in American culture. Social Science & Medicine, 30, 849-57.

Phillips, M.J. (1985). "Try harder": the experience of disability and the dilemma of normalisation. Soc. Sci. J, 22, 45-57.

Pinfold, V., Toulmin,H., Thornicroft, G., Huxley, P., Farmer, P., & Graham, T. (2003). Reducing psychiatric stigma and discrimination: evaluation of educational interventions in UK secondary schools. British Journal of Psychiatry,Apr; 182, 342-6.

Pinar, K.E., & Kahle, L.R. (1984).Adapting to the stigmatizing label of mental illness: Foregone but not forgotten. Journal of Personality and Social Psychology 47, 805-11.

Raingruber, B. (2002). Client and provider perspectives regarding the stigma of and nonstigmatizing interventions for depression. Arch Psychiatr Nurs. Oct; 16(5), 201-7.

Regier, D. A., Narrow, W. E., Rae, D. S., Manderscheid, R. W., Locke, B. Z., & Goodwin, F. K. (1993). The de facto US mental and addictive disorders service system. Epidemiologic Catchment Area prospective 1-year prevalence rates of disorders and services. Archives of General Psychiatry, 50, 85–94.

Roman, P.M., & Floyd, H.H. (1981). Social acceptance of psychiatric illness and psychiatric treatment. Social Psychiatry; 16, 21-9.

Shibre, T., Negash, A., Kullgren, G., Kebede, D., Alem, A., Fekadu, A., Fekadu, D. Medhin, G., & Jacobsen, L. (2001). Perception of stigma among family members of individuals with schizophrenia and major affective disorders in rural Ethiopia. Social Psychiatry and Psychiatric Epidemiology, 36(6), 299- 303.

Susman, L. K., Robins, L. N., & Earls, F. (1987). Treatment seeking for depression by black and white Americans. Social Science and Medicine, 24, 187–196.

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WORKING MEMORY DEFICITS IN SCHIZOPHRENIC PATIENTS

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ABSTRACT

Present study aims to determine the working memory deficits in the patients with schizophrenia. For the purpose, the capacity for working memory was estimated by using the digit span subtest of Wechsler Adult Intelligence Scale-Revised (WAIS-R), for a sample of 35 individuals including 25 schizophrenics and their 10 normal counterparts. The age range of the participant was between 20 to 45 years with at least intermediate education. Statistical application include 't' test in order to obtain the difference between the two groups, (i.e., schizophrenic and normal) as well as difference between the forward and backward recall of digits within the two groups. Results suggest significant difference between schizophrenic patients and their non-psychiatric counterparts for only tasks of backward digit span (t= -3.378, df= 33, p< .002). The difference in the span for forward recall of digits and total score on digit span task was insignificant (t= 1.164, df =33, p>.05; t= -0.920, df=33, p>.05). Further the difference between the forward and backward digit span (t= 3.801, df= 48, p< .000) reflects the impaired working memory in the schizophrenic sample in contrast to non - psychiatric population (t= 1.651, df=18, p>.05).

INTRODUCTION

Memory was once an overlooked deficit in schizophrenia; even the visionary Bleuler mistakenly claimed memory in schizophrenia as intact (Green, 2003). Schizophrenic individuals have clear memory deficits and the size of deficits may be even larger than for other areas of neurocognition (Gold,

Randolph, Carpenter, Goldberg & Weinberger, 1992; Heinrichs & Zakanis, 1998; Saykin et al., 1991). Memory functions have been frequently assayed in schizophrenia. Recall of verbal paired associates, stories, recurring digits, and geometric designs has been reported to be deficient (Saykin et al., 1991). These deficits are often prominent even against a background of general intellectual impairment. For example, Gold et al. (1992) found that schizophrenic patients frequently displayed large discrepancies between IQ and the Wechsler Memory Scale-Revised General Memory Index, with the latter test being lower.

Memory is a heterogeneous concept. The traditional memory functions discussed are called associative, because information is acquired by the repeated contiguity between stimuli and responses or consequences. Among the many types of memory, a special kind is of working memory. The term working memory denotes a type of memory that is active for only short periods (often a few seconds). It is the process for the proper use of acquired knowledge, i.e., the regulation of behavior by representational knowledge, that is, by cognitive schemata. Working memory can be conceptualized as a type of workbench at which new and old information is constantly being transformed, combined, and transformed (Solso, 2001). Baddeley and Hitch (1974) began constructing a working memory model that is still evolving. The model consist of three components i.e., phonological loop, which is considered to be responsible for maintaining and manipulating speech based information; visuospatial sketchpad, supposed to be responsible for maintaining and manipulating the visual or spatial information; and a central executive, responsible for selecting strategies and integrating information. Elvevag and Goldberg (2000) discusses that it has been shown that patients with schizophrenia have problems in each of these three domains. An examination of intelligence quotient scores thought to index the level of functioning pre morbidly, and also of scores indexing current (i.e., morbid) function in schizophrenic patients, found impairments in executive function/ working memory and attention in all patients independently of their IQ scores (Weickert et al, cited in Elvevag & Goldberg, 2000).

Specific problems with the efficacy of working memory in schizophrenic patients were found on cognitive tasks like the "Continuous Performance Test", but there are also specific working memory tasks (Goldman- Rakic, 1991; Park & Holzman, 1992). Among schizophrenic studies that report separate performance data for the forward and backward tasks, Stratta et al. (1997) and Stefanson and Jonsdottir (1996) found schizophrenic patients to perform significantly worse than non psychiatric comparison groups on both forward and

backward digit span tasks. However, Park and Holzman (1992) failed to find a difference between the two populations on either subtests. Conklin et al., (2000) found Schizophrenic patients worse on both forward and backward digit span tasks when compared with non-psychiatric group and first-degree relatives of schizophrenic patients. He discusses that the two tasks differentially assess different cognitive abilities, with forward digit span tasks being the measure of attention, while backward tasks as an indicator of working memory. Working memory is supposed to be a function of short-term memory; while dealing with some mental manipulation of the information required to be retrieved, it is best to consider the backward digit span task as the best measure of working memory.

Thus, for the purpose it was assumed that because of reduced efficiency to serial scanning processes which are supposed to be related to working memory, schizophrenic patients would score low on digit span. Further, as backward recall of digit span would be more related to the working memory, the difference between the forward and backward span of schizophrenic patients would suppose to be significant.

METHOD

Sample

Sample of the present research includes twenty-five schizophrenic participants, attending the outpatient treatment of various psychiatric clinics. The age ranges from 20 to 45 years, with at least education of intermediate. The control group includes ten matched participants on the variable of age, gender and education, having no history of any psychiatric problems as well as no history of any psychiatric problem in first-degree relatives.

Measures

Wechsler Adult Intelligence Scale-Revised (WAIS-R)

Wechsler Adult Intelligence Scale-Revised (WAIS-R; Wechsler, 1981) is a widely used measure of Intelligence, comprise of eleven subscales. Two scores selected for the analyses, were the scores on subtest of forward and backward Digit Span (used to assess the performance on the task related to working memory). The test involves simple task of repeating orally a backward and forward series of digits, with gradual increase in digits, until maximum of nine. Task requires verbal presentation of digit at a rate of one per second. The forward digit span requires participants to repeat the digit verbatim; however, backward test requires the repetition of the presented digits in reverse order.

Procedure

The subjects were approached at various psychiatric out patient settings and were selected according to the diagnoses made by their respective physicians, and clinical psychologist. However, later on they were screened out according to complete interview conducted by the experimenter, and their diagnoses were reconfirmed accordingly on the DSM-IV criteria of schizophrenia. After the screening procedure, the digit span subtest of Wechsler Adult Intelligence Scale-Revised was administered. In the second phase, the selected control population, including the volunteers who match the clinical population on the characteristics of age, gender and education, and having no psychiatric personal and family history.

Statistical Analysis

The difference between schizophrenic individuals and their matched counterparts was analyzed by using't' test for forward, backward and total scores. Further the difference between the forward and backward span was also computed for both the populations again using the't' test.

RESULTS

Table I
Mean differences in scores of Schizophrenic and Normal Individuals on the test of Digits Span

Recall	Group	N	Mean	Std. Dev	F	Sig	t	df	sig
Total	Schizophrenic	25	12.520	4.083	0.748	.393	-0.920	33	.364
	Normal	10	14.000	6.830					
Forward	Schizophrenic	25	7.480	2.451	0.379	.542	1.614	33	.116
	Normal	10	6.000	2.449					
Backward	Schizophrenic	25	5.040	2.071	2.412	.130	-3.378	33	.002
	Normal	10	8.000	2.943					

Table II
Mean differences in the Forward and Backward Digit Span in Schizophrenic and Normal groups

Group	Span	N	Mean	Std. Dev	F	Sig	t	df	sig
Schizophrenic	Forward	25	7.4800	2.4515	1.785	.188	3.801	48	.000
	Backward	25	5.0400	2.0712					
Normal	Forward	10	8.0000	2.9439	0.771	0.391	1.651	18	.116
	Backward	10	6.0000	2.4494					

DISCUSSION

Schizophrenic patients demonstrate significantly low performance than their non-psychiatric counterparts for only task of backward digit span (t= -3.378, df= 33, p<.002). The span for forward recall of digits and total scores on digit span task seems insignificantly different in the two groups (t= 1.164, df =33, p>.05; t= -0.920, df=33, p>.05). However, the less number of participants in the non-psychiatric sample might be a cause of insignificant results. The difference between the forward and backward digit span (t= 3.801, df= 48, p< .000) reflects the impaired working memory in the schizophrenic sample in contrast to non psychiatric population, whose scores are equally well for both tasks (t= 1.651, df=18, p>.05). The difference between the forward and backward digit span indicate that attentional difficulties are not the only factor behind the poor performance of schizophrenics on digit span task. The factor is of course a person's capacity for retaining information in the mind for the appropriate time enough for manipulation. Goldberg et al., (1998), in an attempt to separate the contributing factors of attentional resources and working memory capacity on performance of the digit span tasks conclude that patients with schizophrenia have difficulties in these short term memory tasks because of limitations in representational capacity and maintenance of information over delays, not because of misallocation of attentional resources.

To conclude, results reflect the schizophrenic's difficulty in backward as compared to forward digit span. However, farther research with relatively large sample would be more informative and conclusive.

REFERENCES

Baddeley, A.D., & Hitch, G. (1974). Working memory. In Reed, S.K. (2000) Cognition (5th edition), Wadsworth. USA.

Conklin, H.M., Curtis, C.E., Katsanis, J., & Iacono, W.G. (2000). Verbal working memory impairment in Schizophrenic patients and their first-degree relatives: Evidence from the digit span task. American Journal of Psychiatry, 157, 275-277.

Elvevag, B. & Goldberg, T.E. (2000). Cognitive impairment in Schizophrenia is the core of the disorder. Critical Review in Neurobiology, 14(1), 1-21.

Gold, J. M., Randolph, C., Carpenter, C.J., Goldberg, T.E., & Weinberger, D.R. (1992). The performance of patients with schizophrenia on the Wechsler Memory Scale-Revised. Clinical Neuropsychology, 6, 367–373.

Gold, J.M., Randolph, C., Carpenter, C.J., Goldberg, T.E., &Weinberger, D.R.(1992).Forms of memory failure in schizophrenia. In Green, M. F. (2003) Schizophrenia revealed: From neurons to social interactions. W.W. Norton & Company. London

Green, M. F. (2003). Schizophrenia revealed: From neurons to social interactions. W.W. Norton & Company. London

Goldman-Rakic, P.S. (1991). 'Prefrontal cortical dysfunction in schizophrenia: the relevance of working memory', In Psychopathology and the brain (Eds. B. J. Carroll & J.E.Barrett), Raven Press, New York.

Goldberg, T.E., Patterson, K.J., Taqqu, Y. & Wilder, K. (1998). Capacity limitation in short term memory in schizophrenia: terms of competing hypotheses, Psychological Medicine, 28, 665-673.

Heinrichs, R.W., & Zakzanis, K. K.(1998). Neurocognitive deficits in schizophrenia: A quantitative review of he evidence. In Green, M. F. (2003) Schizophrenia revealed: From neurons to social interactions. W.W. Norton & Company. London

Park, S. & Holzman, P.S. (1992). 'Schizophrenics show spatial working memory deficits'. Archives of General Psychiatry, 49, 975-982.

Saykin, J.A., Gur, R.C., Gur, R.E., Mozley, P.D., Mozley, L.H., Resnick, S.M., Kester, D.B., & Stafiniak, P. (1991). Neuropsychological function in schizophrenia: selective impairment in memory and learning. In Green, M. F. (2003) Schizophrenia revealed: From neurons to social interactions. W.W. Norton & Company. London

Solso, R.B.(2001).Cognitive Psychology (6th ed) Allyn & Bacon . India.

Stratta, P., Daneluzzo, E., Prosperini, P., Bustini,M., Mutti,P. & Rossi, A.(1997). Is Wisconsin Card Sorting Test Performance is related to working memory capacity. In Conklin, H.M., Curtis, C.E., Katsanis, J., Lacono, W.G. (2000). Verbal working memory Impairment in Schizophrenic patients and their first-degree relatives: Evidence from the digit span task. American Journal of Psychiatry, 157, 275-277.

Stefansson, S.B., & Jonsdottir, T.J. (1996). Auditory event related potentials, auditory digit span and clinical symptoms in chronic schizophrenic men on neuroleptic medication. In Conklin, H.M., Curtis, C.E., Katsanis, J., Lacono, W.G.(2000). Verbal working memory Impairment in Schizophrenic patients and their first-degree relatives: Evidence from the digit span task. American Journal of Psychiatry, 157, 275-277.

Weickert, T.W., Goldberg, T.E., Gold, J.M., Bigelow, L. B., Egan, M. F., & Weinberger, D. R., Differential patterns of cognitive impairment in patient with schizophrenia displaying preserved and compromised intellect. In Elvevag, B. and Goldberg, T.E. (2000). Cognitive impairment in Schizophrenia is the core of the disorder. Critical Review in Neurobiology, 14(1), 1-21.

Wechsler, D. (1981). Manual for the Wechsler Adult Intelligence Scale. Psychological Corporation: NY.

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GENDER DIFFERENCES IN ANGER EXPRESSION DURING LATE ADOLESCENCE

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ABSTRACT

The main aim of the present study was to investigate gender differences in anger expression among children in their late adolescence. In the light of literature review it was hypothesized that "Males would score high on the variable of anger expression as compared to females during late adolescence". For this purpose a sample of 485 college students (including 223 females and 262 males) were selected from different colleges of Karachi. The age of sample ranged from 17 years to 19 years and their educational level was intermediate to graduation. Anger Adolescents Rating Scale (Burney, 1994) was administered to assess level of anger expression of the participants. In order to interpret the results in statistical terminology, t- test was computed. The results were consistent with the hypothesis formulated. Male adolescents scored high on anger expression as compared to female adolescents (t=7.642, df =483 P<. 05).

INTRODUCTION

Adolescence is a period of transition, biological, psychological, social and economic. Some changes in this period are long term and some are short term, some are very smooth and some are rough and not all occur at same time. It is quite possibly and perhaps a fact, that some individual will get mature early and some later. The various aspect of adolescence has different beginning and different endings for every individual (Steinberg, 1993). Research in the developmental sciences has long focused adolescence as a time of identity crisis (Erikson, 1968), high stress (Savin-Williams & Demo, 1984), high risk, and transition and change. Although most individuals pass through, this

developmental stage without excessively high level of 'storm and stress', many individuals experience significant difficulties (Brown, 1998).

For boys and girls generally, early adolescence extends from approximately 11 to 14 years of age. Middle adolescence begins at 15 years of age and continues until 18 years of age, after which late adolescence leads into early adulthood, at approximately 21 to 23 years of age. Late adolescence is the developmental phase in which interpersonal relationships, particularly with friends and romantic partners become increasingly important and may lead to conflict situations that elicit emotional responses and activate defensive reactions. Besides that, certain other psychological problems like fluctuation in self-esteem / self-concept, mood and emotional changes occur. The reaction and intensity to these changes varies depending upon many factors; and gender is one of the prominent factors. Emerging gender differences can be caused by individual vulnerability, life stress, and pubertal transitional challenge. There is a difference in the way boys and girls experience the physical and psychological changes related to puberty (Steinberg, 1993).

Among many issues related to differential patterns of both genders, a number of studies focus on different ways of anger expression in both genders (Maccoby & Jacklin, 1980; Sweiffer & Epps, 1999; Cox, Stabb, & Hulgus, 2000). Anger is a negatively toned (i.e., unpleasant) emotion and internal occurrence, which is subjectively experienced as a highly aroused, agitated, and antagonistic state of mind (Novaco, 2000). Anger is a basic emotion, whose function is to provide the organism with motivated capacities to overcome obstacles. Novaco (1975) defined anger as having four distinct components i.e., physiological, affective, behavioral and cognitive. The affective component of anger, also referred to as anger experience, relates to the strength of emotional responses toward anger provoking situations. The behavioral component refers to coping mechanisms, which may be positive or destructive, that people use to express anger. The cognitive components reflect the types of negative beliefs or hostility, that people have about the world and in particular refer to the negative attributions they hold towards others or places.

To a large extent, investigations of anger and its correlates have been hindered by conceptual and methodological confusion surrounding the meaning of anger. Several theorists (Novaco, 1975; Spielberger, 1988) have suggested that the anger construct includes not only an emotional component, but cognitive and behavioral aspects as well. Experience of anger is essentially a feeling or

affective state, which may vary in intensity from mild irritation to unfettered rage. Anger further includes a cognitive or attitudinal component, which underlies ones interpretation of potential anger-provoking situations. The above both researcher further refers to this fairly stable interpretive framework as trait anger whereas others like Barefoot (1992) and Buss (1961) have used the term hostility, to describe a belief system in which one frequently attributes harmful intent to the actions of others. Finally, the construct of anger includes a behavioral component describing one's characteristic manner of responding to anger-inducing events.

The emotion of anger may manifest itself in varying intensity from mild irritation to outbursts of fury and rage (Kassinove & Eckhardt, 1995). The experience and expression of anger have particularly been explored in anger research. Anger has been identified in young infants and its initial experience and expression have been associated with constructive responses such as the ability to persist when encountering frustration. Gender differences in the experience and expression of anger do not appear at this young age. Other studies have also reported significant gender differences in the expression of anger during adolescence (Maccoby & Jacklin, 1980). In both these studies boys were more likely than girls to use physical expression of their anger. In contrast to these results Swaffer and Epps (1999), in their study of male and female adolescents, found no significant differences in either the experience or expression of anger. However, in a study of elementary, middle, and high school students, Cox, Stubb, and Hulgus (2000) found boys significantly more likely to express their anger outwardly than girls. Regarding anger expression, they further reported that females were more likely to have positive coping mechanisms. It may be interesting to also note that these coping mechanisms were all of a passive nature. For example, girls were more likely to share their feelings or talk things over with someone else, when angry. Males were more likely to indicate negative coping mechanisms and it was noted that these were active in character. For example, boys were more likely to break things or disrupt a class when angry. In other study Biaggio (1989) reported significantly more anger producing situations for men than women. These results were tabulated from a self-monitoring two week period that failed to be replicated under more controlled conditions. Sharkin's (1993) review of gender differences in the experience and expression of anger suggest that results are inconclusive and that this may reflect a need for further study in the area. Overall, studies tend to suggest that males are more comfortable in expressing anger over other emotions, such as sadness (Newman et al., 1999; Nunn & Thomas, 1999; Sharkin, 1993). Plant, Hyde,

Keltner, and Devine (2000) also report that people generally stereotype when interpreting emotions such as anger and sadness. It is more likely that displays of anger will be interpreted as an exclusively male domain.

It was previously discussed that boys primarily used overt forms of aggression, whereas, girls used strictly relational aggression. Level of overt aggression is found to be higher in males; however, the level of relational aggression is equal in males and females. To generate the desired reaction, females typically choose to use relational forms of aggression because they tend to value intimate relationships. Males typically use overt forms of aggression and gradually integrate relational forms of aggression into their behavior because they tend to value instrumental goals such as status in a peer hierarchy (Crick, 1997).

A report by the American Medical Association (1996) indicated that violent crime among adolescents' ages 13 to 17 years increased 126% from 1976 to 1992. Media accounts of bullying, assaults, armed robberies, and even homicides committed by children and adolescents have convinced many that youth violence has reached epidemic proportions. Schools as well have experienced an upsurge in violence and violence prevention, and intervention efforts are becoming integral parts of many schools' curricula. A second reason for the growing interest in child and adolescent anger is the substantial body of literature suggesting linkages between chronically high anger and a host of negative behavioral, emotional, and physical consequences. It is becoming increasingly clear, for example, that high levels of anger are causally related to a wide range of physical ailments including hypertension, coronary heart disease, gastrointestinal distress, and even cancer.

Including the above all context, aggression and violence have been popular topics in the field of behavioral research all over the world. However, the role of anger has still received less empirical attention as an independent research especially in our society with reference to its importance. The purpose of choosing specific sample of late adolescence is to analyze the phase which is termination and entry point to adulthood and it is important to assess how this phase affects the individual in the specific area of anger expression. Keeping in view the above mentioned literature hypothesis formulated was that, "Males would score high on the variable of anger expression as compared to females during late adolescence".

METHOD

Sample

Sample of the research consisted of 485 college students (including 223 females and 262 males). Age range of sample was from 17 years to 19 years. Their educational level was intermediate to graduation. The participants belonged to lower and middle socioeconomic class. The sample of students was selected from different colleges (Sir Syed Govt. Girls College, Women College Nazimabad, Baharia College, and Govt. Men College of Karachi).

Procedure and Material

The entire sample was approached through different colleges of Karachi (Pakistan). Proper consent was taken from administration of all these colleges. Data has been collected from subjects individually and their participation was voluntary. Matter of confidentiality was assured. After development of rapport participants were required to respond on a demographic data form. Items in demographic data form focused on adolescent's family system, socioeconomic status, monthly income, birth order, mother language and age. Then the participants responded on Anger Adolescent Rating Scale (AARS; Burney, 1994) which is a 41-item, self-report, likert-type rating scale designed to identify an adolescent's typical mode of anger expression and anger control. It has three Subscales a) Reactive anger: defined as immediate angry response to a perceived negative, threatening, or fear-provoking event. b) Instrumental anger: defined as negative emotion that triggers a delayed response resulting in a desired and planned goal of revenge. c) Anger control: is defined as a proactive cognitive-behavioral method used to respond to reactive or instrumental provocations. After data collection scoring was done with the help of respective manual.

Statistical Analysis

In order to interpret the results in statistical terminology descriptive statistics and t-test were applied using statistical package for social sciences (SPSS 11 version).

RESULTS

Table I
Frequency of data by Education

	Education	Frequency	Percent
Valid N	1st year	79	16.3
	2nd year	238	49.1
	3rd year	66	13.6
	4th year	102	21.0
	Total	485	100.0

Table II
Difference between Male and Female Adolescents on Anger

Group	N	Mean	Std. Deviation	t	df	Sig. Level
Male	262	87.37	25.25	7.642	483	0.000
Female	223	72.13	17.12			

Table III
Difference between Male and Female Adolescents on the variable of Reactive Anger, Instrumental Anger and Anger Control

Variable	Group	N	Mean	Std. Dev	t	df	Sig. Level
Reactive Anger	Male	262	17.54	7.04	.075	481.75	0. 940
	Female	223	17.49	5.67			
Instrumental Anger	Male	262	27.04	17.71	4.528	470.49	0.000
	Female	223	20.59	12.75			
Anger Control	Male	262	27.22	10.24	-3.540	482.98	0.000
	Female	223	30.30	8.66			

DISCUSSION

An analysis of the result (table II) reveals that there is a significant difference on the variable of anger expression between males and females. The results of the present research were consistent with the hypothesis formulated and previous studies. Males scored high on variable of anger expression as compared to females during late adolescence (t=7.642, P <. 05). Emotions are felt differently by the genders; specifically in the context of anger a number of reviews in the last few decades have emphasized the idea that men are more aggressive than women (Maccoby & Jacklin, 1974). More recently, researchers have suggested that gender differences also reflect the use of different forms of aggressive behavior (Eagly & Steffen, 1986). Buss and Perry (1992) have found that, although males (men and boys) are overall more aggressive than females (women and girls), males tend to implement more overt forms of aggression (e.g., kicking, hitting, punching), whereas females utilize covert forms that are more subtle (e.g., gossip, refuse friendship, ostracize). Research shows that levels of overt aggression are higher in males; however, the levels of relational aggression are equal between males and females (Björkqvist, Lagerspetz & Kaukiainen, 1992). Some studies involving adolescents and children have mainly reported results indicating no differences between boys and girls on the experience of anger. However with regard to anger expression, other studies (Maccoby & Jacklin, 1980; Crick, 1997) have reported significant gender differences in the expression of anger; like adolescent males are more likely to outwardly express their anger. In another study of elementary, middle, and high school students, Cox, Stabb, and Hulgus (2000) found boys significantly more likely to express their anger outwardly than girls.

Certain reason and rationale can be coded in this context like males are supposed to be bold in nature and strong in physique. They may express their feelings freely as compared to girls and they express their anger without any hesitation. Girls are supposed to be soft in nature and weak in physique. They may not express directly their feelings or aggression. Most of the societies like our's tend to play an important role in shaping and promoting different mode of emotion expression especially of anger. In our society i.e. sub societies physical forms of aggression from males are accepted comparatively because it agrees with the norms of male behavior. Physically aggressive behavior seems more prominent in male relationships because it is consistent with the norms of boys' peer groups. Boys are likely to communicate their feelings of emotional distress in direct ways whereas, females are comparatively encouraged to suppress their

feelings or use covert method to express their anger. Besides that, in promotion of anger expression or suppression the contribution of role modeling, social role and to some extent differential financial concern for both genders cannot be denied.

Additionally the data (table III) also shows that male adolescents scored high on the two subscales of the anger i.e. Instrumental anger and Anger control while on Reactive anger subscale male adolescent scored low as compared to female adolescents. The high and low scores of male adolescents on the above stated subscales are not consistent in the context of main findings which needs further researches for exploration and possible explanations. However, overall analysis provides comprehension of modes of anger expression in both genders. There is also need for further researches in the related areas with special reference to transition in adolescence and other demographic and psychological variables. Some limitations of the study are that the above mentioned findings are drawn from small opinion based sample; the sample must be large enough so that one can generalize the findings.

REFERENCES

American Medical Association. (1996). Physician Guide to Media Violence. Chicago, IL: Author.

Biaggio, M.K. (1989). Sex differences in behavioral reactions to provocation of anger. Psychological Reports, 64, 23-26.

Barefoot, J. C. (1992). Developments in the measurement of hostility In H. S. Friedman (Ed.), Hostility, Coping and Health (pp. 13-31). Washington, DC: American Psychological Association.

Bjorkqvist, K., Lagerspetz, K.M., Kaukiainen, A. (1992). Do girls manipulate and boys fight?Developmental trends in regard to direct and indirect aggression. Aggressive Behavior, 18, 117-127.

Brown, J. D. (1998). The self. New York: McGraw-Hill.

Burney, M.D. (1994). Adolescent Anger Rating scale. Psychological Assessment Resources, Inc.

Buss, A. H., & Perry, M. (1992). The Aggression Questionnaire. Journal of Personality and Social Psychology, 63, 452–459.

Buss, A. H. (1961). The Psychology of Aggression. New York: Wiley.

Cox, D.L., Stabb, S.D., & Hulgus, J.F. (2000). Anger and depression in girls and boys: A Study of gender differences. Psychology of Women Quarterly, 24, 110-112.

Crick, N. R. (1997). Engagement in gender normative versus no normative forms of Aggression: Links to social-psychological adjustment. Developmental Psychology, 33 (4), 610-617.

Eagly, A.H., & Steffen, V. J. (1986). Gender and aggressive behavior: A meta-analytic review of the social psychological literature. Psychological Bulletin, 100, 309-330.

Erikson, E.H. (1968). Identity: Youth and crisis New York: W.W.Norton. Festinger, L. (1954). A theory of social comparison processes. Human Relations, 7, 71-82.

Graham, S., Hudley, C., & Williams, E. (1992). Attributional and emotional determinants of aggression among African-American and Latino young adolescents. Developmental Psychology, 28 (4), 731-740.

Kassinove, H., & Eckhardt, C. I. (1995). An anger model and a look to the future. In H. Kassinove (Ed.). Anger disorders: Definitions, Diagnosis, and Treatment (pp.197-204). Washington, DC: Taylor & Francis.

Maccoby, E. E., & Jacklin, C. N. (1980). Sex differences in aggression: A rejoinder and reprise. Child Development, 51, 964-980.

Maccoby, E. E., & Jacklin, C. N. (1974). The Psychology of Sex differences. Stanford, CA:Stanford University Press.

Nasby, W., Hayden, B., & DePaulo, B. M. (1980). Attributional bias among aggressive Boys to interpret unambiguous social stimuli as displays of hostility. Journal of Abnormal Psychology, 89 (3), 459-468.

Newman, J.L., Gray, E.A., & Fuqua (1999). Sex differences in the relationship of anger and depression: An empirical study. Journal of Counseling and Development, 77, 198-203.

Novaco, R. W. (2000). Anger. In A. E. Kazdin (Ed.), Encyclopaedia of Psychology (pp. 170-174). Washington, DC: American Psychological Association and Oxford University Press.

Novaco, R.W. (1975). Anger control: The Development and Evaluation of an Experimental Treatment. Lexington, M.A; DC Health.

Nunn, J. S., & Thomas, S. L. (1999). The angry male and the passive female: The role of Gender and self-esteem in anger expression. Social Behavior and Personality, 7(2), 145-154.

Plant, E. A., Hyde, J. S., Keltner, D., Devine, P.G. (2000). The gender stereotyping of Emotions. Psychology of Women Quarterly, 24, 81-92.

Savin-Williams, R. C., & Demo, D. H. (1984). Developmental change and stability in adolescent self-concept. Developmental Psychology, 20, 1100–1110.

Sharkin, B. S. (1993). Anger and gender: Theory, research, and implications. Journal of Counseling and Development, 71, 386-389.

Spielberger, C.D. (1988). State- Trait Anger Expression Inventory: Research edition. Odessa, F.L: Psychological Assessment Resources 35(1), 1-15.

Steinberg, L. (1993). Adolescence. New York: Knopf.

Sullivan, H.S. (1953). The Interpersonal Theory of Psychiatry. New York: Norton.Tangney, J.P., Hill

Swaffer, T. & Epps, K. (1999). The psychometric assessment of anger in male and female adolescent's resident at a secure youth treatment centre. Journal of Adolescence, 22, 419-422.

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THE EFFECTS OF BIRTH ORDER UPON ANGER AMONG ADOLESCENTS: A COMPARATIVE STUDY BETWEEN FIRST AND SECOND BORN

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ABSTRACT

The present research was conducted to investigate the effects of birth order upon anger among first born and second born adolescents. It was hypothesized that the level of anger would be higher in first-born adolescents as compared to second born. The sample consisted of 80 adolescents (40 first born adolescents and 40 second born adolescents) out of which 37 were males and 43 were females. The age of adolescents ranged from 12 to 19 years and their educational level was from grade 6th to intermediate. The selected sample consisted of nuclear families with middle socioeconomic level. t test was applied and it was concluded that first born adolescents have more anger problem as compare to second born adolescents (t=2.44,df=78,p<.05). Whereas insignificant difference was found on the variable of gender in first and second born adolescents (t=1.383, df =58, p>.05) and (t=1.403, df=38, p>.05) respectively.

INTRODUCTION

According to Babladelis (1984), families provide social settings that influence the personalities of their members. Since each child occupies a unique position in a family, it is thought that birth order may correlate to personality. Much of research on personality traits associated with ordinal position is derived from Adler's work. A coherent body of evidence indicates that first born tend to be motivated for achievement and affiliation more than other sibling statuses, but the picture is far from clear. Family size, social class and sex of the child are only some of the variables that complicate the picture.

Birth order is an interesting aspect of life. Adler first introduced the concept of birth order. It pertains to everyone. Personality, which is directly related to birth order, plays a major role in everyday life. Scientists and psychologists have been studying child development and have come up with some interesting findings. Childhood development is influenced by several factors. Genetics and the surrounding environment are two influences that have a major effect on a person's development. The position of a sibling does not influence an individual's personality alone. There are several other factors such as gender, years between other siblings, parents and the type of environment the child was raised in. We plan to prove that birth order does have an effect on personality although the surrounding environment has a profound impact upon the individual. Sulloway's seminal work Born to Rebel (1997) is cited in which he compares birth-order differences in the Big Five personality variables: extraversion; agreeableness; conscientiousness; neuroticism; and openness. It was concluded that the first born are highest achievers; demonstrate highest IQ; greatest educational success and fewest academic problems; highest motivation and need for achievement; over represented among college students, graduate students, college faculty, and other learned groups; least conventional sexuality; most affiliative. While second born have fewest "acting out" problems; sociable; greatest feeling of not belonging; successful in team sports; relates well to older and younger people; competes in areas not attempted by oldest; lowest need for intellectual achievement.

Kidwell (1981) explained that birth-order effect is considerably greater for the first born individuals and the first-born phenomenon is least contaminated by other factors – spacing behind next oldest siblings, for example Sutton-Smith (1970) summarizing sibling studies, reports that first-borns are more achievement- oriented, affiliative and conforming than their after born siblings; Probably because they receive greater parental attention, higher expectations, more reinforcement, more interaction and involvement, and more supervision (Kidwell, 1981). They are the role models, surrogate parents, helpers, companions, and confidents of their parents and carry strong influence on their younger siblings. Although there is less documentation concerning the characteristics of children born to later positions; Middle children are often characterized as the "lost children". With the myth that the middle children in the three child families are the most likely to experience difficulties because of being somewhat neglected in favor of older and younger siblings (Sutton-Smith, 1970).

On the other hand, Toman (1976) suggests that middle children may achieve better socialization as adults because of necessity to learn double or triple roles and thereby being better prepared for a great variety of relationships as adults. According to the study of Harmen and Simon (1988) the first-born child shows more responsibility, sensitivity and anger as compared to later born. They further showed that males have these characteristics twice frequently as compared to female adolescents. This is due to induced factors of environment that are influential to them since very beginning of their lives.

Schachter (1959) discussed that first-born shows more conformity behavior in condition of uncertainty than do later born. MacFarlane et al., (1954) suggested that first born internalized and second born externalized their problems. It further showed that first-born boys not only internalized their problems compared to later born, but they have fewer problems. First born girls on the other hand not only have more problems, but there seems to be a mixture of internalized and externalized problems such characteristics as over activity, irritability, temper tantrums, lying and mood swings (Babladelis, 1984). Sutton-Smith and Rosenberg(1970; as cited in Babladelis,1984) concludes that the first born does appear to exercise power over later born where as second born seems to show the development of tactics for counteracting that influence, perhaps by aggression or other counter action.

Some what different work have been shown by Sampson (1965) that the first born and only children have higher need for achievement, which some studies have found to exist within this group as a possible explanation for achievement striving of the eldest child. Later born children tend to score higher on measure of aggressiveness and lower on impulse control than first born or only born. Perhaps the later findings reflect the rebelliousness and apathy which Adler said might characterize the later-born child's style of life (as cited in Samuel, 1981).

Anger is a human emotion that frequently results in aggression and violence. Adolescents have been increasingly identified as perpetrators of violence (Kazdin, 1987). Researchers have identified many behavioral response of increased anger in adolescents. Dodge and Coie (1987) have found an increase in the rate of delinquent behavior resulting from anger (i.e. indicative of conduct disorder and oppositional defiant disorder) during middle to late adolescence. Although behavioral aggression is not necessarily preceded by anger, most

medical and social scientists agree that anger often serves as a precursor to aggression and violence (Hinshaw, Lahey & Hart, 1993; Walker et al., 1991). The same is evident in the work of Herman and Simon (1988); Sampson (1965) and Babladelis (1984).

The research evidence on the relationship between birth order and aggression appear to be inconclusive. The present research attempts to explore whether and to which extent these two variables are related and to observe the relationship especially in Pakistani population.

HYPOTHESES

In the light of above literature review following hypotheses are derived.

(1) First-born adolescents will exhibit more anger as compared to the second born adolescents.
(2) First-born male adolescents will exhibit more anger as compared to the first-born female adolescents.

METHOD

Sample

Sample for the present research comprised of 80 adolescents out of which 40 were first born (17 first born were males and 23 first born were females) and 40 were second born (20 second born were males and 20 second born were females). The first-born adolescents were not the only child; second born were the sibling of the first-born child and they also had their other siblings. The age of the adolescents was ranged between 12 to 19 years, studying in grades sixth to intermediate level, belonging to middle class nuclear families.

Procedure

The sample was selected purposively and only larger families having 3-4 children were selected. Each subject was approached individually. After taking the consent and establishing rapport a demographic information form was filled. Then Adolescent Anger Rating Scale (Burney, 2001) was administered on them.

Instruments

1. **Form of demographic information**
2. **Adolescents Anger Rating Scale:**

This is 41 items, self-report, likert type rating scale by Burney (2001), to identify an adolescent's typical mode of anger expression and anger control. It consists of three subscales that measure specific aspects of anger in adolescents. T-Score values ranges from 41-59 is depictive of average level of anger or anger control.

(a) **IA (Instrumental anger)** is expressed as delayed or covert anger and is defined as a negative emotion triggers a delayed response resulting in a desired response and planned goal of revenge and /or retaliation.

(b) **RA (Reactive Anger)** is defined as an immediate angry response to perceived negative, threatening or fearful events.

(c) **AC (Anger control)** is defined as a proactive cognitive behavioral method used to resolve instrumental and/or reactive response to anger.

Scoring and statistical analysis

Scoring was done by manual procedure; test for independent mean was applied through the use of SPSS.

RESULTS

Table I
The mean differences on the Variable of Anger in First born and Second born Adolescents

Groups	N	Mean	Stan. Dev	t	p	df
First Born	40	96.0250	10.8969	2.440	p<.05	78
Second born	40	90.5750	8.9868			

Table II
The mean Anger in First born Male and Female Adolescents

Groups	N	Mean	Stan. Dev	t	p	df
Male	17	98.7647	10.15831	1.383	p>.05	38
Female	23	94.0000	11.19659			

Table III
The mean differences on the Variable of Anger in Second born Male and Female Adolescents

Groups	N	Mean	Stan. Dev	t	p	df
First Born	20	87.7	10.65784	-1.403	p>.05	38
Second born	20	92.0	8.87620			

DISCUSSION

Reference to the hypothesis No.1 (table I) the results have indicated that there exists a significant difference between first born(X=96.0) and second born adolescents(X=90.0) regarding anger in Pakistani population (t=2.44, *df* =78, p<.05).

First born adolescents exhibit more anger may be due to the factor that as Adler believe the eldest child tend to be the center of attention in the family before the birth of other siblings; with their birth, he or she is placed in a 'dethroned monarch', forced to share parental affection and attention with others. As a consequence, the eldest child may feel resentment and hostility toward the younger ones. Such negative feelings are likely to occur if the parents have not properly prepared the child for arrival of a sibling or siblings (Ryckman, 2000). In our culture parents usually don't prepared the eldest child for his younger siblings. When younger sibling comes in the family, attention of parents diverted towards new one due to which elder one starts feeling rejecting and develops resentment towards his or her younger sibling. The work of Ansbacher and Ansbacher (1956) showed that first born wants to rule over other. Further Watkin

(1992) suggested that they try to establish themselves in a position of power over other and are found to be more dominant and aggressive than later born. Whereas Adler suggested that among first born are often find to be problem children, neurotics, criminals, and drunkards (cited in Burger, 1986).

Reference to Table II and III it is clear that insignificant difference was found on the variable of anger between male and female adolescents either firstborn or second born (t=1.383,df=38,p>.05)and (t=1.403,df=38,p>.05) respectively. Where as the work of Bahladelis (1984) showed that first born girls have more internalized and externalized problems and showed more temper tantrum. But in our study both males and females express their anger in an alike way. Several researchers showed that first-born children are usually over-achieving-perfectionist-pleasers, which makes them a tough act to follow. A second or middle child may become resentful over feeling he has to compete with "Sister Perfect" (Cohen, Johnson, Lewis & Brook, 1990).

It is indicated that parents and society try in various ways to suppress angry behavior. Children are usually punished for outbursts of anger. In adults, even the slightest display of anger may be frowned upon as socially disapproved behavior." (Morgan, 1961). In our culture both family conflict and quality of parent-child relationships affect the well-being outcomes of children. However, family structure is not related to these outcomes significantly. In the context of present study further researches regarding personality traits and other behavioral problems to more dimensions are suggested.

REFERENCES

Ansbacher,H.L.,&Ansbasher,R.R.(1956).The individual Psychology of Alfred Adler. New York: Basic Books, p 379.

Bahladelis,G.(1984). The study of Personality:Issues and Resolutions. California State University, Hayward. Holt, Rinehart and Winston, 118-139.

Burger , M. J. (1986). Personality: Theory and Research. University of Santa Clara, Wadsworth Publishing Company, Belmont California, 83.

Burney, D.K. (2001).Adolescent Anger Rating scale(AARS). Professional manual. Psychological Assessment Resources Inc.

Cohen, P., Johnson, J., Lewis, S.A., & Brook, J. S. (1990). Single parenthood and employment: Double jeopardy? New York, Plenum, 117- 132.

Dodge, K.A., & Coie, J.D. (1987). Social information processing factors in reactive and proactive aggression in children's peer groups. Journal of Personality and Social psychology, 53,114-115.

Harmon, J.T., & Simon, D. (1988).Birth order and its influences on personality of Adolescents. Devon,PA:Devereux Foudation.

Hinshaw, S.P., Lahey, B.B., & Hart, E.L. (1993). Issues of taxonomy and comorbidity in the development of conduct Disorder. Development and Psychology , 5, 31-39.

Kazdin, A.E. (1987).Treatment of antisocial behavior in children: current status and future directions.Psychological Bulletin, 102, 187-203.

Kidwell, J.S.(1981).Number of siblings, sibling spacing, sex and birth order, their effects on perceived parent-adolescent relationships. Journal of Marriage and Family, 43,315-332.

Mac Farlane, J.W., Allen, L., & Honzik, M.P. (1954). A developmental study of the behavior problems of normal children between twenty one months and forteen years., University of California publication in child development, Berkley 2.

Morgan, L. (1961). Birth order and family influences in the Middle East. Journal of Comparative Family Studies, 2, 88-106.

Ryckman, R.M. (2000).Theories of Personality (7th ed). Wadsworth, University of Maine. Thomson Learning. U.S.A. 125-139.

Sampson, E.E.(1965). The study of Ordinal position: Antecedents and outcomes. In B.A Maha (Ed) Progress in Experimental Personality Research (Vol. 1). New York: Academics.

Samuel, W. (1981). Personality: Searching for the Sources of Human Behavior. International student edition. Mc Graw-Hill international Book Company.

Schachter, S. (1959). The Psychology of Affiliation. Stanford, Ca: Stanford University Press.

Sulloway, F. J. (1997). Born to Rebel: Birth Order, Family Dynamics, and Creative Lives. Revised paperback edition. New York: Vintage.

Sutton-Smith, B.(1970). Psychology of Children: The Triviality Barrier. Western Folklore, 29, 1-8.

Sutton-Smith, B., & Rosenberg, B.G. (1970). The siblings. New york: Holt, Rinehart and Winston.

Toman, W. (1976). Family Constellation. New York: Springer.

Walker, J.L., Lahey, B.B., Russo, M.F., Christ, M.A.G., McBurnett, K., Loeber, R., Stouthamer-Loeber, M., & Green, S. M. (1991). Anxiety, inhibition, and conduct Disorder in children: Relation to social impairment. Journal of the American Academy of Child and Adolescent Psychiatry, 30, 187-191.

Watkins, C.L. Jr. (1992). Birth order research and Adler's theory: A critical review. Individual Psychology, 48, 357-368.

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MALADAPTIVE PARENTAL STYLES AND VULNERABILITY TO ANXIETY IN ADULTHOOD

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ABSTRACT

The present study is an attempt to investigate the effects of perceived maladaptive parental styles on the psychological health of adults. In the light of the research review it has been hypothesized that, individuals who perceive their parental styles as maladaptive are more vulnerable to anxiety than individuals who perceive their parental styles as adaptive. Perceived parental styles and the psychological problems were measured by the Egna Minnen Betraffande Uppfostran (EMBU, Swedish acronym for "My Memories of Upbringing") and Symptom Assessment-45 (SA-45) questionnaire's respectively. The sample comprised of 161 students (81 male and 80 female) from University of Karachi. Initially they filled the demographic information form and then EMBU and SA-45 questionnaires were administered. The scores of EMBU questionnaire of the students were statistically evaluated by 95% Confidence Interval. Later on those who were found to perceive their parent's style maladaptive were compared with their counterparts by the use of one-way analysis of variance (ANOVA) in their level of anxiety to assess statistical significance. Hypothesis is partially supported by the data. For parental rejection it is found to be highly significant, whereas for parental overprotection it is found to be insignificant. However, further t- test calculation reveals significant results for father overprotection, whereas insignificant results for mother overprotection. Overall results reveal that high parental rejection group had significantly higher anxiety as compared to low parental rejection while for high and low overprotection groups the differences were insignificant.

INTRODUCTION

Parents play the most influential and important role in child's development. Since parents are the one with whom child has his sole relationship in his early years of life, child completely depends on his parents for fulfillment of his physical needs. Parents also provide him emotional support. The interaction and emotional relationship between parents and child shape the child's personality and influence child's mental and physical development.

Because of the importance of the early life experiences and its effects on child's personality development, parental styles gained attention of the researchers. Parental style is defined as the characteristic pattern of behavior exhibited by a given parent toward a particular child (Bruno, 1986).

Parents adopt different parental styles for raising their children. Some parents spank, some reason, some parents are strict, some are lax, some parents seem indifferent to their children, and some liberally hug them. Wood, Bishop and Cohen (1978) developed one useful way of organizing and categorizing differences in parenting styles. These writers explain that patterns of parent child interactions in a particular family fall into one of four types, depending approach parents take:

(1) The Potter: Who molds the child into the kind of person he or she feels society requires.

(2) The Gardener: Who creates the conditions necessary for the Child's growth, providing nutrients and eliminating hampering forces.

(3) The Maestro: Who conducts development but, like a great leader leaves flexibility for the child, and

(4) The Consultant: Who transfers more authority for growth to the child but is readily available to provide requested advice.

One of the earliest study entitled, "Mental health and patterns of child rearing in Pakistan" (Ahmad, 1993) assert that positive or a functional parenting is difficult to define. Every society tends to employ accepted norms for raising their children. However an inconsistent and an imbalance relationship with their children lead to various problems in their behavior later in life.

Gerlsma, Emmelkamp and Arrindell (1990) reviewed the literature on perceived parental rearing practices in depressed and anxious patients by meta-analysis. The psychometric and validation properties of questionnaires measuring perceptions of parental rearing styles were investigated, and only studies using satisfactory measures were included in the meta-analysis. Studies were grouped into categories such as specific type of disorder, remitted vs. non remitted cases, males vs. females, and state vs. trait measures of anxiety and depression. Various types of phobic disorder were related to a parental rearing style of less affection and more control as compared with healthy controls. Findings with regard to depression appeared to be less consistent. Both more and less parental affection and more and less parental control were associated with depression, but the largest effect sizes were found for less affection and more control.

In a study by Bennet and Stirling (1998), groups of non-clinical individuals scoring high and low on a measure of trait anxiety were compared to a group of people with a history of clinical anxiety, on measures of locus of control of behavior and reported parental rearing practices. The Parental Bonding Instrument was used to assess parental overprotection and care. A scale relating to parental sensitization was also used in this study. It was hypothesized that the high-trait anxiety group would produce similar results to the anxiety-disorder group on locus of control and parental overprotection, and similar results to the low-trait anxiety group on parental care and parental sensitization. The hypotheses were, in most cases, supported and a relationship between trait anxiety and parental overprotection was suggested. The results also suggested that parental sensitization may be particular to anxiety disorders.

Gruner, Muris and Merckelbach (1999) examined the relationship between perceived parental rearing practices, in particular anxious rearing behaviors, and anxiety symptoms. One-hundred and seventeen school children aged between 9 and 12 years completed the EMBU for children, and the Children's Anxiety Scale, an index of DSM-defined anxiety disorders symptoms. Results showed that there were significant and positive associations between parental rejection, anxious rearing, and parental control on the one hand, and anxiety symptoms on the other hand; emotional warmth was not related to anxiety symptoms.

In a sample of 159 primary school children, the relationship between perceived parental rearing behaviors and self-reported attachment style on the

one hand, and worry on the other hand, was investigated by Muris, Meesters, Merckelbach and Hulsenbeck (2000). Children completed (a) the EMBU, a questionnaire measuring perceptions of parental rearing behaviors, (b) a single-item measure of attachment style, and (c) the Penn State Worry Questionnaire for Children (PSWQ-C), an index of severity of worrying. Results showed that parental rearing behaviors, in particular rejection and anxious rearing, were positively associated with worry. Thus children who perceived their parents as more rejecting and anxious, reported higher level of worry. Furthermore, self-reported attachment style appeared to be related to worry. More specifically, children who classified themselves as avoidant or ambivalently attached displayed higher levels of worry than did children who classified themselves as securely attached. These findings are consistent with the notion that family environment factors such as parental rearing and attachment style contribute to the severity of anxiety symptoms in children.

Research by Seibel and Johnson (2001) on developmental psychopathology has highlighted the role of parental behavior in subsequent development of pathology in children and adolescents. Although parental psychological control has been an area of interest to researchers, the connection between psychological control and anxiety has not been well established. In this research measures of perceived parental control and acceptance (separate forms for mother and father), trait anxiety, and satisfaction with life to 202 undergraduate students were administered. Analysis indicated that perception of parents (both mother and father) as psychologically controlling was significantly positively correlated with trait anxiety and significantly negatively correlated with satisfaction with life. This held even after the effects of psychological control by the other parent were statistically eliminated.

Carter, Shrocco, Lewis and Friedman (2001) investigated the relationship between maternal rearing patterns and trait and state measures of anxiety and depression among a sample of 59 African American and 55 European American College students. Results indicated that both groups reported similar levels of anxiety, depression, perceived care, and perceived overprotection. European Americans exhibited the typical pattern of a negative relationship between anxiety, depression, and care and a positive relationship between anxiety and overprotection. African Americans evidenced a similar negative relationship between anxiety, depression, and care, but no relationship between anxiety, depression, and overprotection.

Hypothesis

In the light of the literature review the following hypothesis was formulated.

The subjects who perceive their parental rearing styles as maladaptive would have significantly higher anxiety scores as compared to those who perceive their parental rearing styles as adaptive.

METHOD

Sample

Total sample comprised of 161 students (81 male and 80 female). The entire sample was collected from different departments of arts and science faculties of the University of Karachi. Sample age range was between 19 to 27 years and mean calculated age was 21.9 years.

Sample was divided into high and low parental rejection and overprotection groups for each parent (mother and father) separately. In order to determine the score bands falling in high and low groups' "95% Confidence Interval" was computed for the two variables under study. The subjects who had average scores were discarded in order to meet the present research requirement.

Procedure

In a group setting the researcher distributed the demographic information form to the entire class of volunteer subjects. Only those subjects were requested to complete the two questionnaires, EMBU (1989) and SA-45 who were living with their real parents (mother and father both) since their birth.

As both the questionnaires were available in English and Urdu languages, subjects were offered the choice to complete the questionnaires in either languages. At the end of the completion of all the questionnaires, the examiner thanked the subjects.

Operational Definitions

Maladaptive Parental Styles are defined as the parental perception of high rejection and high overprotection.

Adaptive Parental Styles are defined as the parental perception of low rejection and low overprotection.

Measures

i. **Demographic Information Form:** consisted of items which focused on the subject's name, age, gender, marital status, academic year, department, number and sex of siblings(s), ordinal position, nuclear/joint family system, approximate monthly income of the family, and information on the basis of which subjects were selected for the present research.

ii. **Egna Minnen Betraffande Uppfostran (EMBU):** Swedish acronym for "My Memories of upbringing" (Perris et al., 1980) is an 81 item self-administered questionnaire, grouped into 14 categories. EMBU was developed as the valid and reliable measure for assessing the perceived parental rearing practices. Arrindell et al (1983) factorially derived dimensions of rejection, emotional warmth, overprotection, and favoring subject, in which 64 out of 81 of the items were distributed across the four scales. All items are scored on 4-point scale (1-4) for mother and father separately. Thus 17 items do not form part of any scale. No specific reference is made to any time frame for which subjects are requested to remember their parents' rearing styles (Arrindell et al., 1989; appendix-D). Two out of four scales that are rejection and overprotection have been used in the present research.

iii. **Symptom Assessment – 45 Questionnaire (SA-45):** is a 45-item self report questionnaire, uses the proven items and structure of the symptom checklist-90 (SCL-90), which provides brief, valid, and reliable measure of psychiatric symptomatology. Using a 5-point level of severity scale ranging from (1) not at all to (5) extremely, the SA-45 measures anxiety, depression, hostility, interpersonal sensitivity, obsessive-compulsive, paranoid ideation, phobic anxiety, psychoticism, and somatization.

Data Analyses

In order to analyze the data of the present research, raw scores (rather than derived scores) obtained from the subjects test protocols for each of the research questionnaires used, as none of the questionnaires used in the research (i.e. EMBU and SA-45) had been standardized on Pakistani population. Initially, on the basis of the obtained raw scores on EMBU scales of parental rejection and overprotection, subjects were divided into groups with high and low scores, for

each of the variable and for the mother and father separately. In order to determine high and low groups for both the variables statistical method of "95% Confidence Interval" was computed. Statistical method used for further analyses of the data in the present research was one way analysis of variance (ANOVA). t-test was then applied to treat the insignificant ANOVA results, in order to analyse which factor contributed in the insignificant results. All the analysis were done through the statistical package in Excel and Minitab.

RESULTS

TABLE I
ANOVA and Comparison of Means of Anxiety between High and Low Parental Rejection Groups

Source	SS	df	MS	F	P-value
Factor	306.9	3	102.3	8.21	0.000
Error	2952.2	237	12.5		
Total	3259.1	240			

Groups	N	Mean	Standard Deviation
F-Rejection-High	42	10.167	4.178
F-Rejection-Low	75	7.813	3.012
M-Rejection-High	43	10.023	4.323
M-Rejection-Low	81	7.667	3.122

F= Father M=Mother

Individual 95% CIs For Mean

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F= Father M=Mother

Individual 95% CIs For Mean

Pooled St. Dev = 3.529

The results indicate **highly significant** difference between high and low parental rejection groups. This shows that high parental rejection group has more anxiety as compared to low parental rejection group.

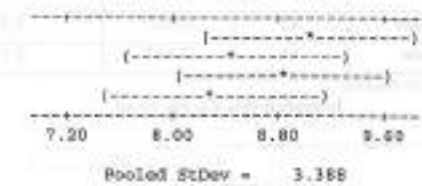
TABLE II
ANOVA and Comparison of Means of Anxiety between High and Low Parental Overprotection Groups

Source	SS	df	MS	F	P-value
Factor	69.2	3	23.1	2.01	0.113
Error	2949.2	257	11.5		
Total	3018.3	260			

Groups	N	Mean	Standard Deviation
F-Overprotection-High	69	9.029	3.670
F-Overprotection-Low	63	7.937	3.047
M-Overprotection-High	69	8.812	3.537
M-Overprotection-Low	60	7.867	3.207

F= Father M=Mother

Individual 95% CIs For Mean



The results indicate **insignificant** difference between high and low parental overprotection groups. This shows that high parental overprotection group and low parental overprotection group has no difference in their anxiety.

TABLE III a

t-test Comparing High and Low Father Overprotection Groups on Anxiety

Groups	N	Mean	Standard Deviation	SE Mean
F-Overprotection-High	69	9.03	3.67	0.44
F-Overprotection-Low	63	7.94	3.05	0.38

F=Father

95% CI for father overprotection mu high - mu low (-0.08, 2.26)

t-test father overprotection mu high = mu low (vs >): t= 1.85 P < 0.033 DF= 130 Pooled St. Dev= 3.39

t-test indicates **significant** difference between high and low father overprotection groups. This shows that high father overprotection group has more anxiety compared to low father overprotection group.

TABLE III b

t-test Comparing High and Low Mother Overprotection Groups on Anxiety

Groups	N	Mean	Standard Deviation	SE Mean
M-Overprotection-High	69	8.81	3.54	0.43
M-Overprotection-Low	60	7.87	3.21	0.41

M=Mother

95% CI for mother overprotection mu high - mu low (-0.24, 2.13) t-test mother overprotection mu high = mu low (vs >): t= 1.58 P =0.058 DF= 127 Pooled St Dev= 3.39

t-test indicates **insignificant** difference between high and low mother overprotection groups. This shows that high mother overprotection group and low mother overprotection group has slight difference in their anxiety.

DISCUSSION

Hypothesis states that "the subjects who perceive their parental rearing styles as maladaptive would have significantly higher anxiety scores as compared to those who perceive their parental rearing styles as adaptive".

This hypothesis is partially supported by the data as for parental rejection it is significant at P< 0.000 and for parental overprotection it is insignificant at P > 0.113 which is greater than a 0.05 level.

According to table I, which depicts significant result, it is quite clear that the subjects who perceived high parental rejection had more anxiety as compared to those perceived low parental rejection. Whereas, table II shows that subjects who perceived high and low parental overprotection did not significantly differ in anxiety level.

Hence it is evident from the results that perception of parental rejection may have played an important role in the vulnerability to adult anxiety. The more severe the parental rejection the greater is the chances of developing anxiety. Individual's perception of being rejected by the parents and not getting attention and care from the parents results in a low self esteem, insecurity, stress, tension, and confusion. This can further lead to anxiety. In the same way individual's who perceive their childhood parental rearing styles as overprotective are unable to develop the independent, effective coping techniques required in their adult years. This make the individual vulnerable to anxiety in later life whenever he has to make an independent decisions, and unable to cope with the problems effectively.

However, t test for further analysis reveals significant results for father overprotection (table III a), whereas insignificant results for mother overprotection (table III b). This shows that father overprotection lead to anxiety, whereas mother overprotection is not related to adult anxiety. The reason might be that in our Pakistani culture mothers are generally more overprotective as compared to fathers. Children usually are used to their mother's over indulgence and overprotection. Therefore mother's overprotection might not lead to anxiety.

REFERENCES

Ahmad, F.Z. (1993). Mental health and patterns of child rearing in Pakistan. Karachi, Institute of Clinical Psychology

Arrindell, W.A., Emmelkamp, P.M., Brilman, E., & Monsma, A. (1983). Psychometric evaluation of an inventory for assessment of parental rearing practices: a Dutch form of the EMBU. Acta psychiatrica scandinavica, 67, 1963-177.

Arrindell, W. A., Methorst, G. J., Kwee, M. G .T., Van der Ende, J., Pol, E. & Moritz, B. J. M. (1989). Expanding the validity of a measure of reported parental rearing practices with psychiatric inpatients: further Dutch experiences with the EMBU. In C. Perris., W. A. Arrindell., & M. Eisemann (Eds.), Parenting and psychopathology (p. 148). Chichester: Wiley & Sons.

Bennet, A., & Stirling, J. (1998). Vulnerability factors in the anxiety disorders. British Journal of Medical Psychology, Sep, 71 (Pt 3): 311-321.

Bruno, F.J. (1986). Dictionary of key words in psychology. London: Billing & Sons Ltd. Worcester.

Carter, M. M., Sbrocco, T., Lewis, E. L., & Friedman, E. K. (2001). Parental bonding and anxiety: differences between African American and European American college students. Journal of Anxiety Disorder, Nov-Dec, 15 (6), 555-69.

Gerlsma, C., Emmelkamp, P. M., & Arrindell, W. A. (1990). Anxiety, depression, and perception of early parenting: A meta- analysis. Clinical Psychology Review, 10, 251-277.

Gruner, K., Muris, P., & Merckelbach, H. (1999). The relationship between anxious rearing behaviors and anxiety disorders symptomatology in normal children. Journal of Behavior Therapy and Experimental Psychiatry, Mar, 30 (1), 27-35.

Muris, P., Meesters, C., Merckelbach, H., & Hulsenbeck, P. (2000). Worry in children is related to perceived parental rearing and attachment. Behavior Research and Therapy, May, 38 (5), 487-97.

Perris, C., Jacobson, L., Lindstrom, H., Von Knorring, L. & Perris, H. (1980). Development of a new inventory for assessing memories of parental rearing behavior. Acta psychiatrica Scandinavica, 61, 265-274.

Seibel, F. L., & Johnson, W. B. (2001). Parental control, trait anxiety, and satisfaction with life in college students. Psychological Report, Apr, 88 (2), 473-480.

Wood, S.J., Bishop, R.S., & Cohen, D. (1978). Parenting. In H. Barocas., W. Reichman & A.I. Schwebel. Personal adjustment and growth: A life – Span approach (p.332). New York: St. Martin's Press.

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A DIMENSIONAL MODEL OF PERSONALITY AND BORDERLINE FEATURES; CORRELATIONAL ANALYSIS

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ABSTRACT

The present study investigates the relationship between dimensional model of personality and borderline features in professionals. After detailed literature review following hypotheses had been formulated, (1) Neuroticism would be positively related to borderline features. (2) Extraversion would be negatively related to borderline features. (3) Openness would be negatively related to borderline features. (4) Agreeableness to experience would be negatively related to borderline features (5) Conscientiousness would be negatively related to borderline features. The sample of present research consisted of 47 individuals (18 females and 29 males) belonging to different professions, with the average age of 27)years and qualification of at least graduation. Borderline features scale (adapted from Personality Assessment Inventory; Morey, 1991) and NEO PI-R (Costa and McCrae, 1992) were administered in order to measure borderline features and five dimensions of personality respectively. Correlation was computed to assess relationship among the variables i.e. five dimensions of personality (including neuroticism, extraversion, agreeableness, openness to experience and conscientiousness) and borderline features. The results were consistent with first hypothesis as borderline features were significantly correlated with neuroticism ($p<0.000$), where as borderline features were found to be insignificantly correlated with other dimensions of Personality like openness ($p > 0.05$), extraversion ($p >0.05$), agreeableness ($p >0.05$) and conscientiousness ($p> 0.05$).

INTRODUCTION

Researches suggest that the five-factor model captures the essential features of personality and that any personality construct can ultimately be mapped onto the factors (McCrae & Costa, 1990; McCrae & Costa, 1997; Goldberg, 1993; Goldberg & Rosolack, 1994). Some maintain that the factors constitute the "universal structure" of human personality (Goldberg, 1993). Many advocate replacing the current categorical approach (in which personality disorders are diagnosed as present or absent) with a dimensional approach, which would treat personality traits as continua (Frances, 1982; Widiger, 1992; Clark, Livesley & Morey, 1997).

In particular, researchers have proposed replacing axis II with a dimensional system based on the five-factor model of personality (Widiger & Frances, 1994). The five-factor model conceptualizes personality in terms of five basic dimensions or traits.

The results of the factor analysis suggest that the domain of personality pathology can be explained reasonably well within the five-factor model of normal personality. The evidence suggests that personality disorders are not characterized by functioning that differs in quality from normal functioning rather, personality disorder can be described with traits or dimensions that are descriptive of personality, both disordered and normal (Schroeder et al., 1992).

Study conducted by Blais in 1997 explored the associations among the domains of the five-factor model (FFM) of personality (neuroticism, extraversion, openness, agreeableness, and conscientiousness) and the DSM-IV personality disorders. The correlational data showed that the DSM-IV personality disorders were most strongly associated with the FFM domains of neuroticism, extraversion, and agreeableness. Factor analysis revealed four underlying factors that provided insights into qualities shared by subgroups of the DSM-IV personality disorders. The domain of neuroticism was associated with the borderline, avoidant, and dependent personality disorders (factor 1). The paranoid, avoidant, schizoid, and schizotypal personality disorders were negatively associated with the domain of agreeableness (factor 2). The domain of extraversion was positively associated with the narcissistic and histrionic personality disorders and negatively with schizoid personality disorders (factor 3). The FFM conscientiousness and openness domains loaded onto a single factor and were positively associated with the obsessive-compulsive personality

disorders and negatively associated with the antisocial and borderline personality disorders. Exploring the relationships between these two personality systems will improve our conceptualization and understanding of the DSM-IV-TR personality disorders.

Sauleman and Page (2004) conducted a research to examine the relationships between each of the five-factor model of personality dimensions and each of the 10 Diagnostic categories of personality disorder in diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV). Results were analyzed both within each individual personality disorder category and across personality disorders, indicating how personality disorders are different and similar respectively, with regard to underlying personality traits. In terms of how personality disorders differ, the results showed that each disorder displays a five-factor model profile that is meaningful and predictable given its unique diagnostic criteria. With regard to their similarities, the findings revealed that the most prominent and consistent personality dimensions underlying a large number of the personality disorders are positive associations with Neuroticism and negative associations with Agreeableness. Extraversion appears to be a more discriminating dimension, as indicated by prominent but directionally variable associations with the personality disorders. It has also been proved by Berlin and Rolls (2004) in their research with especial reference of borderline personality disorder.

Borderline personality disorder is a complex and serious mental disorder characterized by a pervasive pattern of instability in regulation of emotion, interpersonal relationships, self-image, and impulse control. It is estimated to occur in 1-2% of the general population (Torgersen et al., 2001) and is the most common personality disorder in clinical settings, affecting 10% of all psychiatric outpatients and 15-20% of inpatients (Widiger & Frances, 1989). Borderline personality disorder is characterized by severe functional impairment, substantial treatment utilization, and a mortality rate by suicide of almost 10% – 50 times higher than the rate in the general population (Work Group on Borderline Personality Disorder, 2001).

Five factor analytic studies of Borderline personality disorder diagnostic criteria have been published (Rosenberg & Miller, 1989; Clarkin et al., 1993; Fossati et al., 1999; Sanislow et al., 2000). The Fossati et al., (1999) analysis was consistent with a unidimensional construct, but the others suggested either a two-factor structure consisting of interpersonal and identity disturbance and

dysregulation of behavior and affect (Rosenberg & Miller, 1989) or more commonly, a three factor structure consisting of disturbed relatedness, affective or emotional dysregulation, and behavioral dyscontrol or impulsivity (Clarkin et al., 1993; Sanislow et al., 2000). These factors are thought to reflect core dimensions of borderline psychopathology.

In a research conducted by Wilberg, Urnes, Friis, Pedersen, Karterud (1999) it was found out that Borderline personality disorder was associated with high levels of Neuroticism and low levels of Agreeableness, Extraversion, and Conscientiousness. 88% of the avoidant personality disorder group had high scores on Neuroticism and low scores on Extraversion, whereas 65% of the borderline personality disorder groups were high on Neuroticism and low on Agreeableness. The Extraversion and Agreeableness scales of NEO PI-R discriminated between patients with borderline personality disorder and those with avoidant personality disorder. Patients with borderline personality disorder scored significantly higher on the Anger, Hostility and Impulsiveness subscales of Neuroticism and significantly lower on three Extraversion subscales, three Agreeableness subscales, and one Conscientiousness subscale. The findings suggest that the FFM has good discriminating ability regarding borderline personality disorder and avoidant personality disorder.

In the same it has also been concluded that patients with borderline personality disorder will be less extraverted, less conscientious and not open to experiences, and more neurotic than healthy controls (Berlin & Rolls, 2004). In the same study it has also been concluded that borderline personality disorder patients reported being more emotional than normal controls in terms of their total subjective emotion score, specifically, borderline personality disorder patients reported experiencing more sadness, anger, fear, and disgust, and less happiness than normal controls (Berlin & Rolls, 2004). These results are consistent with the fact that a major criterion for the diagnosis of borderline personality disorder is emotional instability (APA, 1994). In fact, Borderline Personality Disorder is thought by some to arise from affective vulnerability as reflected by high sensitivity to emotional stimuli and high emotional intensity (Linehan, 1993; Herpertz et al., 2001). Borderline personality disorder patient's emotion and impulsivity may be interrelated (Linehan, 1987; Van Reekum, Links & Fedorov, 1994; Herpertz, 1995; Herpertz et al.,1997).

Berlin and Rolls (2004), also found that borderline personality patients were less conscientious (thorough, reliable, persevering, efficient, organized,

goal-oriented versus careless, disorderly, lazy, and distractible as defined by McCrea & Costa in 1996) than normal controls, which coincides with the fact that they tend to careless about themselves (exemplified by their self-harming behavior), and lack energy. Further, the correlation analysis showed that as conscientiousness decreases, impulsivity, and total subjective emotion, and borderline personality characteristics, increase.

Another finding of Berlin and Rolls (2004) is that borderline personality patients are not as open to experience (wide interests, original, curious, artistic, imaginative, inventive, idealistic vs. closed to experience) as normal controls could be related to the fact that they are impulsive and introverted. Indeed openness to experience was negatively correlated with self-report impulsivity and positively with extraversion in a group, which included borderline personality patients. Eysenck and Eysenck (1985) suggest that the tendency of lack of openness to experience in Borderline personality disorder patients might arise because being introverted makes one less interested in exploring new things. Additionally, being impulsive might make one have insufficient patience to explore new ideas or concepts thoroughly.

The objective of present study is to determine the correlation among the five dimensions of personality and borderline features, for this purpose following hypotheses were formulated: borderline feature would be positively related to neuroticism, while negatively related to extraversion, agreeableness, openness and conscientiousness.

METHOD

Sample

The sample of the present study consisted of 47 individuals (18 females and 29 males); belonging to different professions including doctors, teachers, dieticians, graphic designers, human resource developers, and bankers. The sample collected from different Educational Institutions, Hospitals and Banks (i.e. standard charted). Their age ranges from 20 to 35 years with average age of 27 years, while their education level was at least Graduation.

Measures

In order to assess five dimensions of personality NEO PI- R (Costa & McCrae, 1992) was administered. NEO PI- R, 60-items inventory, was used to measure five dimensions of personality, i.e., neuroticism, extraversion, openness, agreeableness and conscientiousness, each comprised of 12-items. Borderline

features were measured by using a clinical scale extracted from Personality Assessment Inventory (PAI) that is "borderline features", this scale is comprised of 24 items and further divided in to the subscales including Affective Instability, Identity Problem, Negative Relationship and Self-Harm each comprised of 6 items (Morey, 1991).

Procedure

With informed consent of authorities the respondents in each of the organization were selected on the basis of purposive sampling technique. They were required to complete the demographics regarding Name (i.e. optional), Age, Gender, Qualification and Profession and then they were asked to rate themselves on the clinical scale of Borderline Features (Morey, 1991), and NEO PI- R (Costa and McCrae, 1992).

Scoring

Scoring of the clinical scale of Personality Assessment Inventory i.e. Borderline features (Morey, 1991), and NEO PI- R (Costa & McCrae, 1992) was done according to the standard procedures given in the respective manuals.

Statistical Analysis

Respondent's rating of Borderline features and five dimensions of personality was taken as scores. Pearson product moment coefficient of correlation was applied to determine the relationship among the given variables.

Operational Definitions of Various Terms

Borderline Features: Scale focus on attributes indicative of a borderline level of personality functioning, including unstable and fluctuating interpersonal relations, impulsivity, affective lability, instability and uncontrolled anger.

Neuroticism: Contrasts emotional stability and even-temperedness with negative emotionality, such as feeling anxious, nervous, sad, and tense.

Extraversion: Implies an energetic approach to the social and material world and includes traits such as sociability, activity, assertiveness, and positive emotionality.

Openness to experience: (versus closed-mindedness) describes the breadth, depth, originality, and complexity of an individual's mental and experiential life.

Agreeableness: contrasts a prosocial and communal orientation toward others with antagonism and includes traits such as altruism, tender-mindedness, trust, and modesty.

Conscientiousness: describes socially prescribed impulse control that facilitates task and goal-directed behavior, such as thinking before acting, delaying gratification, following norms and rules, and planning, organizing, and prioritizing task.

RESULTS

Correlation between Borderline Features and Five Dimensions of Personality
Table I

Personality Dimensions	r	P value
Neuroticism (N)	0.642	0.000*
Extroversion (E)	-0.284	0.053
Openness (O)	0.182	0.222
Agreeableness (A)	-0.180	0.226
Conscientiousness(C)	-0.174	0.243

* Significant results

Table II
Mean Scores on Borderline features and Subscales of NEO PI-R

Variables	N	Mean
Borderline (B)	47	28.98
Neuroticism (N)	47	21.957
Extroversion (E)	47	27.638
Openness (O)	47	24.723
Agreeableness (A)	47	26.574
Conscientiousness(C)	47	30.89

DISCUSSION

As reflected from table 1 that there is significant correlation between borderline features and neuroticism ($r = 0.642$, $P<0.000$) is indicative of the relationship's strength between variables. This findings is also supported by a research evidence as a study evaluated the accuracy of hypothesized relationships of the five-factor model of personality to four targeted personality disorders including Borderline, Schizotypal, Avoidant, and Obsessive-Compulsive Personality Disorder, and Major Depression (without personality disorder) comparison group; the findings were that each shared the configuration of high Neuroticism, low Agreeableness, and low Conscientiousness (Morey et al., 2002). According to the five-factor model, most personality disorders are characterized by extreme neuroticism, that is, vulnerability to stress, impulse dyscontrol, and negative emotionality (Widiger et al., 1994).

Trull and associates (2003) have recently shown that a borderline index emphasizing five-factor model facets of neuroticism (e.g., impulsiveness, angry hostility, and depressiveness) accounted for global dysfunction after variance explained by more traditional measures of borderline personality disorder. Another analysis indicates substantial relationships between the Big Five factors and many personality disorder scales. The Neuroticism factor demonstrated the strongest relationships with personality disorders (Schroeder, Wormworth & Livesley, 1992).

Another study shows that The "Big Five" dimensions" neuroticism," "extraversion," "agreeableness," "conscientiousness," and "openness to experience" have been shown to be necessary and sufficient to provide a comprehensive description of human personality almost independent of cultural background (Pukrop, 2001; Costa & McCrae, 1994). In the same way Trull in 1992 also concluded that personality dimensions of Neuroticism, Extraversion, and Agreeableness were most apparent in the conceptualizations of the personality disorders.

Further analysis of data revealed that extraversion is negatively related with borderline personality features but this negative relationship is insignificant. This might be because the sample of this study is consisting of professionals belonging to different professions (doctors, teacher, human resource developers, bankers) that require sociability, assertiveness and positive emotional expression.

Therefore to fulfill these requirements they have to modify their behavior, besides having some underlying proneness towards borderline features.

Likewise the aftermaths of the present study also unveiled the fact that openness, agreeableness, extraversion and conscientiousness are not significantly related ($p<0.222$, $p<0.226$, $p<0.053$ and $p<0.243$, respectively) to borderline features. Although agreeableness and conscientiousness are negatively related to borderline features but their relationship is not significant. The reason might be the small number of sample. If sample was increased, the results might be obtained according to the assumptions.

Another reason for insignificance of the results might be the selection of sample. The sample has been selected form non-clinical population and except neuroticism all the other factors (Extraversion, openness, conscientiousness and agreeableness) might be working at the sub threshold level in non clinical population.

Whereas, openness to experience seemed absolutely unrelated to borderline features as people with borderline personality features / disorder are usually experience their world in "black and white" they never go into depth and originality of realities, while openness in its real means being described as depth, originality and complexity of an individual's mental and experiential life. Similarly, in studies it has been proved that Openness to Experience was unrelated to personality disorders at the domain level (Clark, 1993; Ball et al., 1997), it was also the weakest domain to separate Borderline, Avoidant, Obsessive-Compulsive, or Schizotypal personality disorders (Morey et al., 2002).

Albeit, there are number of researches showing significant relationships among personality disorders and five factors of personality. But simultaneously there is also evidence that criticizes five-factor models of normal personality for lacking diagnostic utility with regard to the clinical descriptions of personality disorders (Coolidge et al., 1994). Although many relationships of personality traits and disorders were obtained but simultaneously we also have evidences against these relationships as the five-factor model represents a sound distillation of the personality constructs used by laypersons. However, it omits key clinical constructs and may not capture the complexity of personality syndromes seen in clinical practice. (Shedler & Westen , 2004)

From a five-factor perspective, personality disorders are simply extreme variants of normal personality traits (Widiger & Frances, 1994). But analysis according to the five-factor model of personality often lacks the specificity to characterize complex personality disorders.

A related concern is that the five-factor model is too superficial for clinical (versus lay) personality description. One researcher characterized it as describing the "psychology of the stranger" (McAdams, 1992) that is, the way a person appears to another after a casual encounter (e.g., gregarious, hostile, modest). Others have noted that everyday language may not be differentiated enough for scientific and clinical purposes (Block, 1995; Westen , 1995 and Millon & Martinez 1995).

Five-factor model research has relied heavily on self-report instruments that assume people report accurately on their own personalities. However, research by Shedler et al., (1993) on "illusory mental health" demonstrates that self-report scales cannot distinguish between psychologically healthy individuals and emotionally disturbed individuals who lack self-awareness. Other research demonstrates that important cognitive, affective, and motivational processes (i.e., personality processes) may be implicit rather than explicit and not accessible by self-report (Westen, 1998)

Finally, the five-factor model focuses on behavioral tendencies (e.g., extroversion) and relatively obvious internal states (e.g., depression) but not on the psychological processes that are the focus of much clinical work. For example, it is common in clinical practice to encounter patients who are angry but also inhibited about experiencing and expressing anger. A moderate score on an anger dimension would not differentiate between individuals who are conflicted about anger expression and those who truly have a moderate level of the trait.

REFERENCES

American Psychiatric Association (1994). Diagnostic and Statistical Manual of Mental Disorder (4th ed.; DSM-IV). Washington DC: Author.

Ball, S.A., Tennen, H., Poling, J.C., Kranzler, H.R., & Rounsaville, B.J. (1997). Personality, temperament, and character dimensions in substance abusers. Journal of Abnormal Psychology, 106, 545-553.

Berlin, H. A., & Rolls, E. T. (2004). Time Perception, Impulsivity, Emotionality, and Personality in Self-Harming Borderline Personality Disorder Patients. Journal of Personality Disorders, 18(4), 358-378, The Guilford Press.

Blais, M.A. (1997). Clinician Ratings of the Five-Factor Model of Personality and the DSM-IV Personality Disorders. Journal of Nervous and Mental Disease, 185(6):388-394. http://www.jonmd.com/pt/re/jnmd/abstract.

Block, J. (1995). A contrarian view of the five-factor approach to personality descriptions. Psychological Bulletin, 117:187–215

Clark, L.A. (1993). Personality disorder diagnosis: Limitations of the five-factor model. Psychol Ing, 4:100-104

Clark, L.A., Livesley, W.J., & Morey, L. (1997). Personality disorder assessment: the challenge of construct validity. Journal of Personality Disorder, 11:205–231

Clarkin, J.F, Hull, J.W., & Hurt, S.W. (1993). Factor structure of borderline personality disorder criteria. Journal of Personality Disorder 7:137-143.

Coolidge, F.L., Becker, L.A., Di Rito, D.C., Durham, R.L., Kinlaw, M.W., & Philbrick, P.B. (1994). On the relationship of the five-factor personality model to personality disorders: Four reservations. Psychol Rep, 75:11-21.

Costa, P.T., & McCrae, R.R. (1992). Revised NEO Personality Inventory (NEO PI-R) and NEO Five-Factor Inventory (NEO-FFI): Professional Manual. Odessa, Fla, Psychological Assessment Resources

Costa, P.T., & McCrae, R. R. (1994). Stability and change in personality from adolescence through adulthood. In: Halverson, C.F., Kohnstamm, G.H., Martin, R.R., Eds. The developing structure of temperament and personality from infancy to adulthood. Hillsdale: Erlbaum: 139–50.

Eysenck, H.J., & Eysenck, M.W. (1985). Personality and individual differences: A natural science approach. New York: Plenum Press.

Fossati, A., Maffei, C., Bagnato, M., Donati, D., Namia, C., & Novella, L. (1999). Latent structure analysis of DSM-IV borderline personality disorder criteria. Comprehensive Psychiatry 40:72-79.

Frances, A. (1982). Categorical and dimensional systems of personality diagnosis: A comparison. Comprehensive Psychiatry; 23:516–527

Goldberg, L. (1993). The structure of phenotypic personality traits. American Psychology, 48:26–34

Goldberg, L.R., & Rosolack, T.K. (1994). The big five factor structure as an integrative framework: An empirical comparison with Eysenck's P-E-N model, In The Developing Structure of Temperament and Personality From Infancy to Adulthood. Edited by Halverson, C.F., Kohnstamm, G.A., Martin, R.P. Hillsdale, NJ, Lawrence Erlbaum Associates, 7–35

Herpertz, S. (1995). Self-injurious behaviour. Psychopathological and nosological characteristics in subtypes of self-injurers. Acta Psychiatrica Scandinavia, 91, 57-68.

Herpertz, S., Gretzer, A., Steinmeyer, E.M., Mühlbauer, V., Schürkens, A., & Sa[]H. (1997). Affective instability and impulsivity in personality disorder: Results of an experimental study. Journal of Affective Disorders, 44, 31-37.

Herpertz, S.C., Dietrich, T.M., Wenning, B., Krings, T., Erberich, S.G., Willmes, K., Thron, A., & Sass, H. (2001). Evidence of abnormal amygdala functioning in borderline personality disorder: A functional MRI study. Biological Psychiatry, 50, 292-298.

Linehan, M.M. (1987). Dialectic behavioral therapy: A cognitive behavioral approach to parasuicide. Journal of Personality Disorders, 1, 328-333.

Linehan, M.M. (1993). Cognitive-behavioural treatment of borderline personality disorder. New York: Guilford Press. Neuroscience, 4, 317-323.

McAdams, D. (1992). The five-factor model in personality: a critical appraisal. Journal of Personality, 60:329–361

McCrae, R., & Costa, P. (1990).Personality in Adulthood. NY, Guilford.

McCrae, R., & Costa, P. (1996). Toward a new generation of personality theories: Theoretical contexts for the Five Factor model. In J.S. Wiggens (Ed.), The Five Factor Model of Personality: Theoretical perspectives (pp. 51-78). New York: Guilford Press.

McCrae, R., & Costa, P. (1997). Personality trait structure as a human universal. American Psychology, 52:509–516

Millon, T., & Martinez, A. (1995). Avoidant personality disorder, in The DSM-IV Personality Disorders. Edited by Livesley WJ. New York, Guilford, pp 218–233

Morey, L.C. (1991). The Personality Assessment Inventory. Professional Manual. Psychological Assessment Resources, Inc.

Morey, L.C., Gunderson, J.G., Quigley, B.D., Shea, M.T., Skodol, A.E., McGlashan, T.H., Stout, R.L., & Zanarini, M.C. (2002). The representation of borderline, avoidant, obsessive-compulsive, and schizotypal personality disorders by the Five-Factor Model. Journal of Personality Disorder, 16:215-234

Pukrop, R., Gentil, I., & Steinbring, I., et al (2001). Factorial structure of the German version of the dimensional assessment of personality pathology-basic questionnaire in clinical and nonclinical samples. Journal of Personality Disorders, 15:450–6.

Rosenberg, P. H., & Miller, G. A. (1989). Comparing borderline definitions: DSM-III borderline and schizotypal personality disorders. Journal of Abnormal Psychology, 98:161-169.

Samislow, C., Grilo, C.M., & McGlashan, T.H. (2000). Factor analysis of DSM-III-R borderline personality disorder criteria in psychiatric inpatients. American Journal of Psychiatry, 157:1629-1633.

Saulsman, L., & Page, A.C. (2004). The five-factor model and personality disorder empirical literature: A meta-analytic review. In Clinical Psychology Review, 2005 May; 25(3):383-94.

Schrooder, M., Wormworth, J., & Livesley, W. (1992). Dimensions of personality disorder and their relationships to the big five dimensions of personality. Psychological Assessment, 4, 47-53

Shedler, J., & Westen, D. (2004). Dimensions of personality pathology: An alternative to the five-factor model. American Journal of Psychiatry. http://www.ncbi.nlm.nih.gov/entrez/query.

Shedler, J., Mayman, M. & Manis., M. (1993). The illusion of mental health-American Psychology, 48, 1117- 1131.

Torgersen, S., Kringlen, E., & Cramer, V. (2001). The prevalence of personality disorders in a community sample. Archives of General Psychiatry, 58, 590-596.

Trull, T. (1992). DSM-III-R personality disorders and the five-factor model of personality: an empirical comparison. Journal of Abnormal Psychology, Aug; 101(3), 553-60. http://www.ncbi.nlm.nih.gov/entrez/query.

Trull, T., Widiger, T., Lynam, D., & Costa, P. (2003). Borderline personality disorder from the perspective of general personality functioning. In Skodol, A.E., Oldham, J.M., Bender, D.S., Dyck, I.R., Robert, L., Stout, R.L., Morey, C., Shea, M.T., Sanislow, Z. A., Grilo, C.M., McGlashan, T.H., & Gunderson, J.G., (2005). Dimensional Representations of DSM-IV Personality Disorders: Relationships to Functional Impairment. American Journal of Psychiatry, 162, 1919-1925,

Van Reekum, R., Links, P.S., & Fedoruv, C. (1994). Impulsivity in borderline personality disorder. In K. Silk (Ed.), Biological DC: American Psychiatric Press, Inc.

Westen, D. (1995). A clinical-empirical model of personality: life after the Mischelian ice age and the NEO-lithic era. Journal of Personality, 63, 495–524

Westen, D. (1998). The scientific legacy of Sigmund Freud: Toward a psychodynamically informed psychological science. Psychological Bulliten, 124, 333–371

Widiger, T., & Frances, A. (1989). Epidemiology, diagnosis, and comorbidity of borderline personality disorder. In Tasman, A., Hales, R.E., Frances, A.J.,(Ed). American Psychiatric Press Review of Psychiatry, Volume 8. Washington, DC, American Psychiatric Press, 8-24

Widiger, T. (1992). Categorical versus dimensional classification: implications from and for research. Journal of Personality Disorders, 6:287–300

Widiger, T., & Frances, A. (1994). Towards a dimensional model for the personality disorders, in Personality Disorders and the Five Factor Model of Personality. Edited by Costa, P., Widiger, T. Washington, DC, American Psychological Association, pp 19–39

Widiger, T., Trull, T., Clarkin, J., Sanderson, C., & Costa P. (1994). A description of the DSM-III-R and DSM-IV personality disorders with five-factor model of personality, in Personality Disorders and the Five-Factor Model of Personality. Edited by Costa, P., & Widiger, T. Washington, DC, American Psychological Association, 41–58.

Wilberg, T., Urnes, Ø., Friis, S., Pedersen, G., & Karterud, S.(1999). Borderline and Avoidant Personality Disorders and the Five-Factor Model of Personality: A Comparison of DSM-IV Diagnoses and NEO-PI-R. Journal of Personality Disorder, 13(3):226-240.

Work Group on Borderline Personality Disorder (2001). Practice guideline for the treatment of patients with borderline personality disorder. American Journal of Psychiatry, 158 (Suppl): 1-52.