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PARENTAL DIVORCE AND PSYCHOLOGICAL WELL-BEING OF CHILDREN

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ABSTRACT

In the present study it was demonstrated that parental divorce has negative impact on the Psychological well being of children. It was hypothesized that a) mean score of need for achievement and self esteem of children of divorced women would be lower than the children of married women and b) mean score of depress mood and aggression would be more in children of divorced women than the children of married women. In order to test these hypotheses CAT was administered on the children (aged 6-12 years) of divorced and married women. The "t" test indicated that the mean score of self-esteem of children of divorced women was significantly lower than the mean score of self-esteem of children of married women. The Mean aggression and depress mood scores were significantly higher in the children of divorced women than the mean aggression and depress mood scores of children of married women. Whereas there was no significant difference in the mean scores of need for achievement of children of both the groups.

INTRODUCTION

Divorce is having a devastating impact on both adults and children. Every year parents of over 1 million children divorce. These divorces effectively cut one generation off from another. Children are reared without the presence of their father or mother. Children are often forced to take sides in the conflict and children often carry the scars of the conflict and frequently blame themselves for the divorce (Anderson, 1997).

The emotional upheaval that often accompanies the crises phase is likely to affect the relationship that children have with their custodial parent. Children may become quite cranky, disobedient or otherwise "difficult" while parent who have the custody may suddenly become more punitive and controlling (Hetherington, Cox & Cox, 1978). Hetherington, Cox and Cox (1982) reports that in the few years following divorce,

children of divorce families in comparison to children of non-divorced families show more aggression and non-compliance, more dependency, anxiety, depression and more difficulties in social relationship and more problems in school. In the first two years or so after a divorce, children typically become more defiant more negative, often more depressed, angry or aggressive. Their school performance typically goes down for at least a while (Mitchell, Hammond, & Bee, 1983).

Cherian (1989) in his study found that the academic achievement of children whose parents were divorced or separated were significantly lower than that of the children whose parents were neither divorced nor separated. Smith and Thomas (1995), reported that parental separation negatively effects school grades rather academic achievement. Study by Mc Combs and Forhand (1989) also shows that "school performance following divorce is not uniform in all adolescents and that family factors may mediate scholastic achievement".

Amable (1991) observed that each year many children experience the trauma of parental divorce. Latency age and early adolescent children are particularly vulnerable to emotional sequel, as evidenced by lower self-esteem, declining sense of social competence, and a higher than usual propensity for substance abuse, depression, and suicide. Spigelman and Spigelman (1991) explored the appearance of depressive feature, as reflected by responses to the Rorschach test, in two groups of children from divorced and non-divorced families. Children of divorced families scored significantly higher on Exner's Depression Index (1986) than their counterparts. Furthermore, children of divorced families with depressive features in their Rorschach responses were found to have a higher level of hostility and aggression, whereas no such association was found among children of intact families. In another research, Bynum and Dunn (1996) investigated the temporal relationship of divorce with self esteem of children and assessed the differences in self-esteem, if any, between the children of divorced families and children of intact families. A significant difference was found between the two groups. Holroyed and Sheppard (1997) in their study saw the effects of parental separation on their children. The results suggested that over 60% of the girls showed internalizing, over 60% of the boys displayed externalizing behavioral difficulties and about 40% of the children suffered from psychosomatic disorder.

Johnston (1994) in his article reviews available research studies of high-conflict divorce and its effects on children. As a group children of high-conflict divorce as defined above, especially boys are two to four times more likely to be clinically disturbed in emotions and behavior compared with national norms. Amato (1994) found children who experience parental divorce, as compared to children in intact two parent families exhibit more conduct problems, more symptoms of psychological maladjustment lower academic achievement, more social difficulties, and poor self-concept. Kurtz (1994) compared the psychosocial coping resources of elementary school age children living in the sole custody of a divorced parent with those of living with their non-divorced parents.

Children of divorced parents were found to have lower level of self-esteem, social support, and less effective coping styles.

Initial process of divorce is stressful and can have a negative and life long impact on the children involved (Dauck, 2004). In view of Conner (2004) the impact of divorce is that children will have problems and experience symptoms, this may include one or more of the following:

a) Impulsive and impatient behavior, b) Anger at others, c) Oppositional, rebellious, defiant, or conduct problems, d) Breaking rules and testing limits, e) Destructive behavior, f) Anger at Self, g) Self-destructive or self-harming behavior, h) Drug or alcohol use, i) Apathy or failure to accept responsibility, j) Early or increased sexual activity, k) Isolation and Withdrawal, l) Suicidal thoughts or behavior, m) Violent thoughts or behavior, n) Superficially positive behavior.

Cited in Cartwright (2005) that research from a wide range of studies indicates that children and adolescents whose parents separate are at risk of developing serious adjustment problems. Although the majority appear to fare adequately following a transition period (e.g., Hetherington & Kelly, 2002).

Judith Waller stein (Waller stein & Lewis) has also emphasized the impact of separation /divorce on children through to adulthood in her longitudinal study which used clinical style interviewing. She points to ongoing mental health problem, feeling of distress related to the divorce, and marked problems in developing and sustaining intimate relationship (as Cited in Cartwright, 2005).

It is clear from above researches that breakup in parental relationship has a negative impact on the psychological well being of children. This study aims to find out difference in the level of need for achievement, self esteem, depress mood and aggression between children of divorced and married women.

METHOD

Sample consisted of 30 children of divorced women including 15 children of working women and 15 children of non-working women. Control group also consisted of 30 children of married women comprising 15 children of working and 15 children of non-working women. The age of these children was between 6-12 years. Reference to Papilia and Olds (1986) the age range of middle childhood is from 6 to 12 years. These children were matched on the basis of age, gender and equal number of children in each family. Children of those divorced women who had received divorce one year back and who were living with their parental family were included in the sample. The children of

married women consisted of children of those females who were living with their husbands. The age range of mothers whose children were included in the sample was from 18-35 years and their educational level was from intermediate up to graduation. All women were matched on the basis of their education, age, and socio economic class, number of children and age of their children.

Procedure

The entire sample of divorced women was taken from City Court Karachi. The advocate dealing with the cases of divorced women were approached. With the consent of the advocate of divorced women the researchers approached the divorced women. They established rapport with them. They were interviewed and detailed history was taken. Married working and non-working women were approach through different school principals and they were also interviewed. With the consent of mothers children of divorced and married women were interviewed. This also helped in creating rapport with them. Children Apperception Test - Human figures (CAT-H) developed by Bellak (1975) was then administered.

Scoring and Statistical Analysis

After collection of data the response sheets of CAT were scored for each child on the variable of: Need for Achievement, Self Esteem, Depress Mood and Aggression on five point rating scale, where 1=Very Low, 2=Low, 3=Moderate, 4=High and 5=Very High. To assess the inter rater reliability of CAT scoring a sample of 10 protocols were selected. Another trained and qualified psychologist rated every 6th case. The Pearson Product moment Coefficient Correlation was then applied on all the variables.

Operational Definitions of Various Variables

Need for Achievement

Aspires to accomplish difficult; maintain high standards and is willing to work towards distant goals; responds positively to competition; willing to put forth effort to attain excellence. Striving, accomplishing, capable, purposeful attaining, industrious achieving, aspiring, enterprising, self-improving, productive, driving ambitious, Resourceful and Competitive.

Self Esteem

Corey (1984) defines self-esteem as "the way one feels about one self, including the degree to which one posses self respect and self-acceptance. Self esteem is the sense of personal worth and competence that person associate with their self concept".

Depress Mood

Depress Mood in this research is taken as the child's temporary state of sadness, loss/lack of interest or pleasure in all/almost all or usual activities and past times.

Aggression

Enjoys combat and argument; easily annoyed, sometimes willing to hurt people to get own way; may seek to "get even" with people perceived as causing harm. Quarrelsome, irritable, argumentative, threatening, attacking, antagonistic, pushy, hot tempered, easily angered, hostile, revengeful belligerent, blunt, retaliate.

RESULTS

Table

The Mean score difference between Children of Divorced and Married Mothers on the variable of Need for Achievement, Self Esteem, Depress Mood and Aggression

VARIABLES	GROUPS	MEAN	SD	df	t	Sig
Need for Achievement	Children of Divorced N=30	2.37	1.27	58	-5.73	P>.05
	Children of Married N=30	4.10	1.06			
Self Esteem	Children of Divorced N=30	1.90	1.21	58	-8.57	P<.01
	Children of Married N=30	3.90	1.04			
Depress Mood	Children of Divorced N=30	3.90	1.08	58	9.94	P<.01
	Children of Married N=30	1.467	0.776			
Aggression	Children of Divorced N=30	3.90	1.21	58	7.30	P<.01
	Children of Married N=30	1.73	1.08			

DISCUSSION

It is quite clear from the table, that on the variable of need for Achievement, the mean score of children of divorced women is 2.37 and for children of married women it is 4.10. The result is not statistically significant (p>.05) which indicate that divorce does not play an important role in reducing the need for achievement in the children of divorced women. As need for achievement may motivate a child to strive hard to achieve in variety of situations, and achieving good grades is one of such situations, therefore we

can interpret that need for achievement of children of divorced mothers do not seem to be much lower. This may be because they don't want to loose any other thing in their lives after loosing one parent.

Difference of both the groups on the variable of Self Esteem is significant (P< 0.001). According to the table, the mean score of self-esteem of children of divorced women is 1.90 where as the mean score of children of married women is 3.90. Similar difference was noted on the variable of depress mood (P< 0.001). The mean score of depress mood of the children of divorced mothers is 3.90 and the mean score of depress mood in the children of married women is 1.46. Hence it is clear that self-esteem of the divorced children is less and their mood is more depress. It may be because of the stressful life event they have to go through which the children who are living in a normal family structure don't have to pass. Parental divorce makes children psychologically weak. Children also notice negative attitude of the society towards them and they start thinking as if they are lacking something. In different social occasion especially when other children talk about their parents they become tense. Questions relating to parental separation by their peers make them feel sad and gloomy. Their mothers may also become tense and their attitude towards their children become different than their previous behavior, which results into confusion and doubts. Mothers become more involved in financial and legal issues and children become lonelier due to absence of significant person in their lives.

Further the mean aggression score of the children of divorced women is 3.90 whereas the children of married women is 1.73 (p< 0.001) which makes it clear that the aggression in children whose parents are divorced is more as compared to children who are living with their married mothers. It is obvious that parental divorce influence the children negatively. Before and during divorce parental discord, conflict and aggression make them stubborn. After divorce due to legal procedures and living arrangements children become more aggressive and hostile. In school they may sometimes involve in physical combat and do not follow teacher's instructions. To discipline children in our society mostly responsibility rest upon the fathers and father's absence make these children more prone towards arguments, irritability and hostility.

Hence negative impact on children is one of the reasons why in the Muslim society divorce is considered as least preferred among all legal acts.

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EFFICACY OF COGNITIVE BEHAVIOR THERAPY WITH PANIC DISORDER: A SINGLE CASE STUDY

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ABSTRACT

Panic Disorder is very debilitating, distressing for the sufferers and has comorbidity with other psychiatric disorders. Though it is very commonly reported disorder in clinical practice, research on efficacy of different management strategies and therapeutic interventions is non-existent in Pakistan. The present study employed single case design to examine the efficacy of behavioral and cognitive management strategies with panic disorder. Stanford Panic Appraisal Inventory, State Trait Anxiety Inventory (STAI), Fear Questionnaire and Beck Depression Inventory (BDI) were used to assess the patient prior to, in the middle and after completion of intervention sessions. Intervention consisted of cognitive behaviour therapy including anxiety management, panic management and challenging dysfunctional thoughts. Therapy consisted of 13 sessions conducted twice a week initially and later on once a week. Analysis revealed that the symptoms gradually decreased over sessions and the patient remained panic free at follow-up. The findings support effectiveness of psychological intervention with panic disorder.

INTRODUCTION

Panic disorder (PD) is considered to be an important public health problem (Margraf, Barlow, Clark, & Telch, 1993) and is reported to be commonly occurring problem in the general public (Myers, et al., 1984; Wittchen, 1988). Patients with PD seek professional help more often than patients with any other disorder (Boyd, et al., 1990). Long-term prognosis is worse than that for depression, if PD is not treated properly (American Psychiatric Association, 1994; Wittchen, 1988).

Over the last few years researchers and practitioners have focused their attention to PD and remarkable advancements have been seen in the treatment strategies of PD. There is ample research evidence to suggest that cognitive-behavioural techniques (CBT) are very effective to treat PD (Acierno, Hersen, & Van Hasselt, 1993; Clum, 1989; Clum, Clum, & Surls, 1993; Gould, Otto, & Pollack, 1995; Michelson & Marchione, 1990) and have in fact produced satisfactory results (Garcia-Palacios et al., 2002). In a developing country like Pakistan, it is important to conduct research on efficacy of different therapeutic interventions in order to work out cost-effectiveness of a particular intervention. Since there is sufficient empirical data to affirm that CBT is the most effective procedure to treat PD, in the present study we wanted to extend these findings in Pakistan.

Case report

S.Z. aged 26, was seen at the psychiatric outpatient clinic at Government Hospital for Psychiatric Diseases, Lahore, as he was experiencing recurrent panic attacks in the past one month. He was also experiencing low mood resulting from the distress, apprehension and avoidance because of the attacks.

The patient was the youngest among his five siblings. His father was a Hakim in their ancestral hometown and was extremely dominating, authoritarian, and punitive. His mother died of heart attack 16 years ago. Two of his elder sisters were schizophrenic and were under treatment. His other two sisters were married and his brother is a cardiologist. The patient was close to his brother and shared his problems with him.

S.Z. described himself as a cool tempered individual and felt that he was restricted a lot during his childhood by his father and he was not allowed to participate in any extra-curricular activities or sports. It was when he left home for his higher studies that he could feel himself free to participate in such activities. He was an above average student and at the time of treatment he was working as a physiotherapist after having completed his training.

The patient had been under enormous stress prior suffering PD as his father wanted him to quit his job and work with him in Hikmat and return back to village. Secondly, he had started reading some Islamic books recently which were putting him in a lot of mental turmoil and making him feel worried about his future life.

A month before consultation the patient experienced his first episode of panic attack. He was in the hospital talking to a staff nurse when he started feeling intense anxiety, his heart beat increased alarmingly, he started sweating and felt he had no control on himself and was afraid that he would fall down, felt nauseated and suffocated. Initially he thought it was because he was talking to someone but later on the attacks

came unexpected and in higher frequency. Thereafter the patient started feeling apprehensive constantly about the recurrence of the attack.

METHOD

Research Design

The present research employed single case study design.

Assessment Measures

Diagnostic Interview: Interview was conducted to gather information on personal details, the reason for consultation, duration of problem, perceived severity of the problem and to make a tentative diagnosis.

Scales and Inventories: All below given instruments were used Pre-treatment, Mid-treatment and Post-treatment.

1. Stanford Panic Appraisal Inventory was used to examine the severity of symptoms of panic experienced by the client.

2. State Trait Anxiety Inventory (Spielberger, 1985) (STAI) is the definitive instrument for measuring anxiety in adults. The STAI clearly differentiates between the temporary condition of "state anxiety" and the more general and long-standing quality of "trait anxiety." The essential qualities evaluated by the STAIS-Anxiety scale are feelings of apprehension, tension, nervousness, and worry. On the STAIT-Anxiety scale, consistent with the trait anxiety construct, psychoneurotic and depressed patients generally have high scores.

3. Fear Questionnaire (FQ) (Marks & Mathews, 1979). FQ is 22-item inventory that consist of five subscales. The first 16 items refer to agoraphobia, blood-injection phobia and social phobia. Another subscale is of worry about feeling anxious or depressed. There is also a scale of overall evaluation of the present state of the phobic symptoms.

4. Beck Depression Inventory (BDI, Beck and Steer, 1987) was used to assess severity of depression in the client. Inventory comprises of 21 items scale measuring severity of depression on a four point rating scale.

A baseline chart was prepared and given to monitor the frequency and intensity of the panic attacks. Panic diary was also maintained to record the frequency and intensity of panic attacks during the course of therapy. *Rating Scales* for problem areas identified by the patient (anxiety, low mood, lack of self confidence, apprehension, and stammering) were prepared and the patient was required to rate himself on these scales throughout the course of therapy.

The Diagnostic and Statistical Manual for Mental Disorders (DSM IV) was used to diagnose the patient.

DIAGNOSIS

AXIS I	300.01	Panic Disorder without agoraphobia
AXIS II	V71.098	No Diagnosis
AXIS III		None
AXIS IV		Problems with primary support group (father's authoritarian attitude and insistence on leaving his profession and joining his father's profession)
AXIS V	GAF	51-60 (on admission) 71-80 (at discharge)

Treatment

Treatment consisted of anxiety and panic management, challenging dysfunctional thoughts, and cognitive behavior therapy. Sessions were conducted twice a week in the first three weeks and then onwards once a week. Thirteen sessions were conducted for 50 minutes each. Follow up was maintained on regular basis.

Therapeutic Techniques

Intervention was based on both cognitive and behavioral techniques. Coping strategies were taught to deal with the panic attacks and cognitive techniques were used to delete his faulty and dysfunctional thinking.

Relaxation Training was taught as the client was trained to practice tensing and releasing different muscle groups in turn, until he was able to relax and concentrate on the corresponding sensations with the minimum of prompting from the therapist (Bernstein and Borkovec, 1973). The patient was taught 16 muscle relaxation to help him to be able to identify a state of relaxation and tension and to teach him to relax in a tense situation. S.Z. was instructed to carry out this exercise on daily basis and anxiety ratings were taken before and after the exercise.

Panic Management was taught through bibliotherapy and counseling about the disorder. Coping rules were given to the patient to read every time he would experience a panic attack to enable him to survive through the attack.

Disputing Irrational Beliefs was done using the Dysfunctional thought chart. The patient was first instructed to write down his automatic thoughts in a panic or anxiety provoking situation and then he was taught how to dispute them. He was then instructed to monitor

and dispute his automatic negative thoughts every time he suffered from anxiety and panic attack.

Cognitive Restructuring was done in session. The client was made aware of the worst consequences and made to evaluate how many times it had really happened up till now. He was made to realize how the negative thoughts contribute in exacerbating his panic attacks and how they could be reduced by changing his cognitive set. The patient was taught that his physical sensations were harmless, thus eliminating subsequent misinterpretations (Beck, 1988). Initially the client was briefed about the general nature of panic attacks, the actual causes of his bodily sensations, and his tendency to misinterpret them. Once the client was convinced as to the accurate explanation of his physical sensations he was able to remind himself in real-life situations that the sensations were not signs of impending catastrophe, thus "shorting out" the panic sequence at an early point. Over the course of therapy the client was taught to "distract" himself from his sensations by, for example, starting conversations with other people when the sensations occurred.

Problem Solving Strategies were used to help the client in dealing with his familial problems. Hedonic Calculus was used to help him come to a decision regarding his father's demands and his future vocational choice.

Coping Statements were used to increase the client's self-confidence. He was instructed to repeat those statements in sub-vocally as forcibly as possible.

Assertiveness Training was also given to enable the client to communicate to his father his decision about his vocational choice.

RESULTS

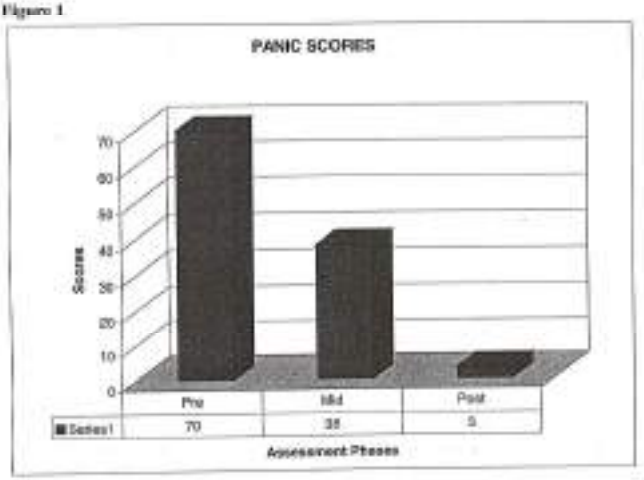
Table I

Scores of the patient on Stanford Panic Appraisal Inventory, Fear Questionnaire (FQ), State Trait Anxiety Inventory, and BDI were computed and comparisons of pre, mid and end of intervention scores is presented in table given below and Figures 1, 2, 3 &4

Assessment Tools	Pre-Treatment	Mid-Treatment	Post-Treatment
Stanford Panic Appraisal Inventory	70	38	3
Fear Questionnaire	80	43	4
State Trait Anxiety Inventory (STAI)			
State Anxiety (s-scores)	77	32	16
Trait Anxiety (t-scores)	83	28	15
Beck Depression Inventory (BDI)	28	6	1

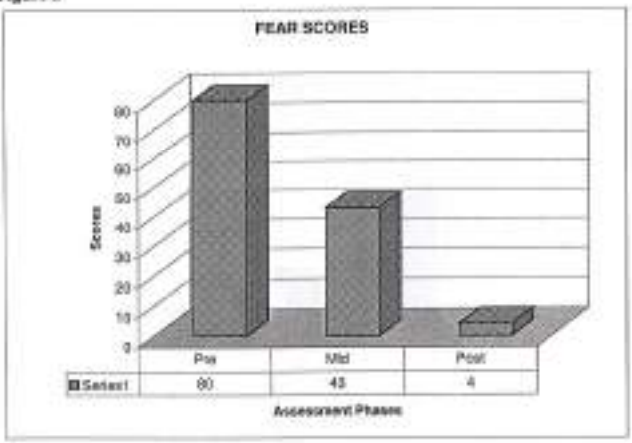
The Post assessment evaluation of the client showed a marked decrease in all scales. The patient reported being panic free for the past one month and his apprehension about the attack had reduced significantly. Panic symptoms decreased significantly as his scores on Stanford Panic Appraisal Inventory indicates i.e., 70, 38 and 3 at pre-treatment, mid-treatment and post treatment respectively. Treatment gains were maintained at the one-month follow-up period. There were no panic attacks during this time and the client was not at all apprehensive about its occurrence.

Figure 1



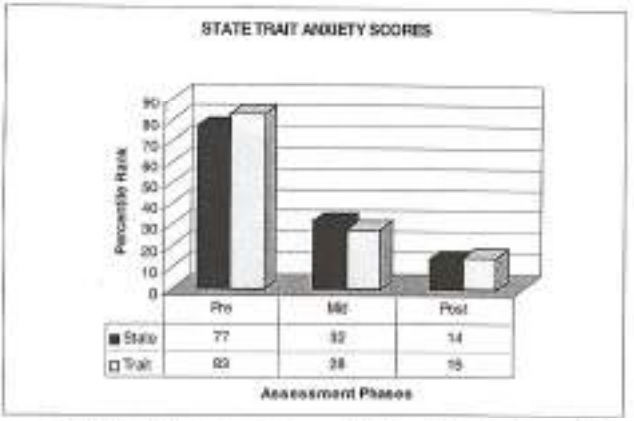
On the Fear Questionnaire, the patient's scores fell from a pre-treatment score of 80, to a mid-treatment score of 42. At post-treatment they further fell to a score of 4. Moreover the client subjectively reported being more confident in going to places where he used to be afraid of going in the past such as crowded shops, or traveling alone in a public bus.

Figure 2



According to the client's subjective perception he no longer felt that he would loose control or suffocate and that he was able to live through anxiety provoking situations by using the coping rules and cognitive work. He reported that he was no more apprehensive at his work place and was rather relaxed and cool while dealing with his patients and colleagues. He felt he was more in control of his feelings and that deep breathing and disputing helped him especially in countering his panic thoughts. He had learnt the panic rules by heart also and whenever he felt that an attack might precipitate he would read them out loud to himself or if patient was in the room he would recite them in his heart till such time that he would feel control on his feelings.

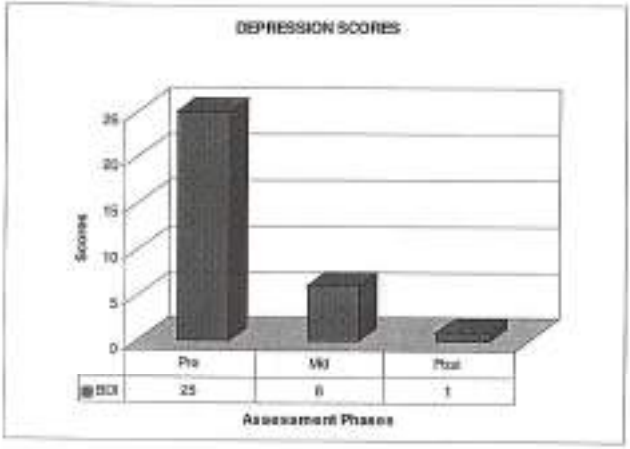
Figure 3



On Anxiety Scales the patients scores fell both on Trait and State scales (see Figure 3). He practiced relaxation exercise everyday. He had included walk into his daily routine and at his clinic he practiced deep breathing exercises regularly. According to him, these helped him in reducing his constant feelings of apprehension and anxiety. Apart from that, he kept copy of the coping rules in his pocket initially, and read them out whenever he felt he was about to have a panic attack and later he learnt them by heart. As a result he was able to enjoy his work a lot more and his interpersonal relationship with his patients and colleagues improved. He had taken a trip home by a public bus and did not feel suffocated or anxious while traveling long distance in a relatively crowded bus alone and was happier at his accomplishment.

There was an overall elevation in mood state by the end of the therapy which was supported both by the subjective feelings of the patient and objective ratings on the BDI. His scores on BDI decreased from a pre-treatment level of 25 to 1 post-assessment level, which clinically is considered as no depression (see Figure 4).

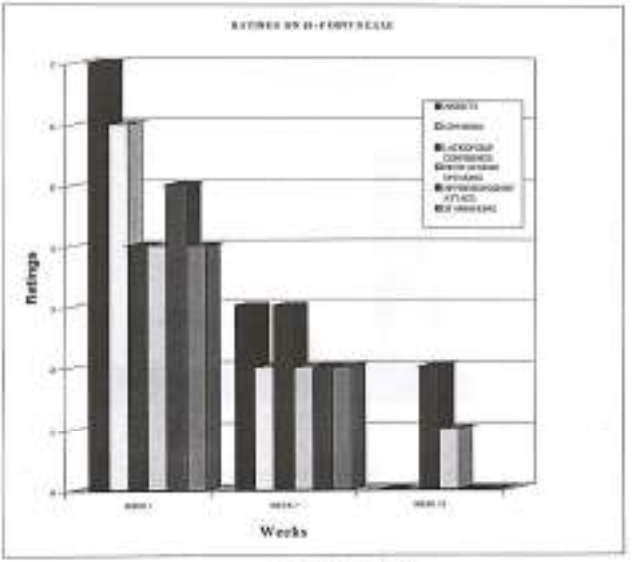
Figure 4



Moreover, the client reported being in high spirits, enjoying his job and taking part in lot more activities. He felt more confident and able to make decisions about future and career. This enabled him to establish more meaningful and fulfilling interpersonal relationships as well.

On the subjective ratings on five problem areas identified by the client there was a sharp decline during the first 2 weeks of the therapy and then a gradual decrease successively. According to the client, anxiety and depressed mood had almost disappeared; hesitancy in speaking to people had decreased and self-confidence had also increased.

Figure 5



DISCUSSION

The results from the present study provide evidence that the treatment programme applied was effective with Panic Disorder. The patient showed marked decrease in symptoms of panic, anxiety, depression, and other deficits, which were experienced by him prior to the treatment. In addition, the patient's overall general functioning level such as social skills, self-confidence, ability of decision making also improved markedly. The findings are consistent with those of earlier studies, which have demonstrated effectiveness of CBT with Panic Disorder (Acierno, Hersen, & Van Hasselt, 1993; Clum, 1989; Clum, & Surls, 1993; Gould, Otto, & Pollack, 1995;

Michelson & Marchione, 1990; Power et al, 2000; García-Palacios et al., 2002; Sharp, Power & Swanson, 2004).

Despite marked reduction in symptoms at the end of the treatment and follow-up, and consensus of the findings with existing research, one needs to be cautious interpreting these findings due to inherent limitations of a single case design. The client under study was reluctant to bring any family member along and the therapist could not cross validate any of his symptoms, and his own subjective account had to be relied upon. An objective account of his personality and family dynamics could also not be obtained apart from the client's own report. Supportive family work could not be carried out which would be useful in long-term maintenance of therapeutic gains. Moreover, this study did not carry out follow-up for longer time therefore it is important for future research to have regular follow-ups for a period of 6-9 months and the scales being used for assessment should be administered every 2 months to monitor long-term gains and prevent relapse. Despite limitations, this is an important attempt to examine utility of different psychotherapeutic techniques in a country where efficacy of psychotherapeutic interventions and the role of psychotherapist is yet to be acknowledged.

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HANDEDNESS AND PERFORMANCE ON THE MEASURES OF VISUAL MOTOR PERCEPTION AND ACADEMIC ACHIEVEMENT

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ABSTRACT

The purpose of present study was to determine differences between left & right-handers in their Performance on the Measures of Visual-Motor perception and Academic Achievement. On the basis of literature review, it was hypothesized that the left-handers would perform low on measure of Visual-Motor Perception as compared to right-handers. It was also hypothesized that the left-handers would score high on arithmetic and low on reading and spelling sub test of academic achievement test as compared to right-handers. A sample of 99 students, including 48 Right-handers (16 males, 32 females) and 51 Left-handers (16 males, 35 females) was selected from different educational Institutes of urban areas of Karachi. The age range of the participants was from 15 – 22 years ($\bar{X}$ =18 years). After obtaining personal information the Handedness Questionnaire (Coren 1992) was administered to determine the hand preference of the subjects. Bender Gestalt Test (Pascal, 1951) was administered to assess the Visual-Motor Perception and Wide Range Achievement Test-3 (Wilkinson, 1993) was administered to assess academic achievement of subjects in the areas of Spelling, Arithmetic & Reading. The t-test analysis showed that left-handers scored high on BG as compared to right-handers (t = 2.177, df = 97, p< 0.05). It was also found that the left-handers scored low on reading subtest as compared to right-handers (t = -2.760, df = 97, p < 0.01). However, the difference between performance of left and right-handers on arithmetic (t = .217,df=97, p >0.05) and spelling sub-test (t= .539, df=97, p>0.05) was insignificant.

INTRODUCTION

Handedness and the differences between those with different hand preferences has been the recipient of attention of researchers since past several decades till now. The term handedness may refer either to hand preference or to the asymmetrical performance of manual tasks (Annett, 1976; Harrison & Pauly, 1990; Shimoyama, Ninchoji & Uemura, 1990; Provins and Magliaro, 1993). Handedness is often considered as the clearest example of behavioral lateralization in humans (Volkmann, Schnitzler,Witte & Freund,1998). Some authors have attributed handedness to functional hemispheric asymmetries of the cognitive-motor processes involved in movement control (Hudand & Harrington, 1996), whereas others have attributed handedness to structural brain asymmetries (Annett, 1992). Hand preference is usually defined as the tendency to perform several tasks with one hand rather than the other, and handedness shows substantial individual variability. (Annett, 1970; Oldfield, 1971; Bryden, 1977; Chapman & Chapman, 1987).

Vlachos & Bonoti (2004), suggested that left-handers have an intrinsic advantage due to superior spatial/motor skills (as they are presumably right hemisphere dominant). When a split-brain patient was asked to copy a series of drawings using the left and right hand, there was a clear superiority of the left hand in dealing with the implied three-dimensional relationships, although the right hand was slightly better at carrying out the drawing movements (Gazzaniga, 1967).

Porac and Coren (1981) found that left-handers perform better on certain spatial tasks, particularly ones involving the ability to mentally manipulate images (e.g. Mental Rotation Task). Gabbard, Hart, & Gentry (1995) while analyzing the motor skills in young (approximately seven years) children, discovered that left and mixed-handed children are inferior to right-handed children in motor performance. Smith (1983) determines the developmental trends in the difference between right-hand and left-hand skills in children as measured by the Motor Accuracy Test-Revised (MAC-R). Data showed no consistent significant differences. The differences between right and left-handed children arose from the poorer performance of left-handed boys on fine motor tasks. (Giagazoglou, et al, 2001).

Natsopoulos, Kiosseoglou & Xeromeritou (1992) examined spatial ability and its relationship to handedness. They found that the left-handed individuals in their study had enhanced spatial, mathematical, and general intellectual abilities. Benbow (1986) found that left-handers and mixed-handers were over-represented among highly gifted adolescents who excelled in either mathematical or verbal reasoning ability. However, Hardyck et al (1976) studied handedness, intelligence and arithmetic aptitude of school children and did not find any relationship between handedness and mental test performance. One of the systematic studies on this topic was conducted by Douglas et al (1967), who analyzed the relationship between handedness and educational achievement

of British children. There were no differences in mean attainment scores for different handedness types. However, there was a significant excess of children with inconsistent hand preferences among those scoring more than one standard deviation below the mean.

In children with extraordinary mathematical aptitude, left-handedness is reported to be two times more common than in the general population (Annett & Kilshaw, 1982; Benbow, 1988). Benbow (1986) has emphasized the superiority of left-handers (LHs) in artistic, and mathematical abilities. Bishop (1989) examined the relationship between preference and task proficiency with mathematical modeling. By assuming that hand preference is exponentially related to relative manual proficiency, Bishop developed a model that accounted for the modest size of correlations between preference and asymmetry in motor proficiency, as well as the differences in the distribution patterns of hand preference and asymmetrical proficiency. He concluded that different aspects of motor proficiency (i.e. speed, strength, etc.) might have differential importance in determining hand preference for different manual tasks.

In addition Annett and Kilshaw (1982), argue that enhanced mathematical ability is related to a decreased dextral bias. They tested a group of subjects for handedness; those who excelled in mathematics were more biased to the left side than the controls. They conclude that these results arise because many right-handers are too biased to left-hemispheric language. This over-specialization makes it more difficult for many right-handers to function well with both hemispheres, and mathematics is a skill that requires an individual to put spatial constructs into linguistic terms. Thus the activities involved in mathematics require the cooperation of left-hemisphere language functions and right-hemisphere spatial functions, and this sort of cooperation is harder for extremely right-biased individuals to achieve. On the other hand mixed-handers, who Annett believes, make up a large portion of apparent left-handers, are better able to coordinate the hemispheres because of their lack of bias to one side.

Besides superior performance in mathematics, left-handers supposed to have specific problems related to writing and reading. A phenotypic association between left-handedness/ambidexterity and dyslexia has been reported (Geschwind and Behan 1982). Tonnessen et al (1993) illuminate a possible three-way association between dyslexia, immune disorders, and left-handedness. Geschwind's, Behan's, and Galaburda's hypotheses have been of special interest in this connection, there seems to be some association between these three constructs. Of the three factors, handedness seems to be the most important association. The findings thus lend some support to the one interpretation of the hypotheses of Geschwind, Behan, and Galaburda.

Poor phonology is predicted at the left and some other weakness at the right, as in the distinction of "phonological" versus "dyseidetic" poor spellers (Bader, 1973) and "phonological" versus "surface" dyslexics (Coltheart & Coltheart, 1993). Reading ability might vary with right-left hand skill, such that children with mild biases to the right hand

have advantages for learning, while children at both left and right extremes have disadvantages. Poor readers tended to have weak left hand skills, giving strong right hand preferences in many cases. Those with additionally poor right hand skills tended to be of low intelligence. Good left hand skills and raised incidences of mixed and left hand preference were found only in a small subgroup, "bright dyslexics" (Annett & Manning, 1990).

Lamm & Epstein (1999) suggest that the studies of brain lateralization lend support to the hypothesis that language-motor functions in left-handers are differently organized from those in right-handers. However, the implications of these differences regarding cognitive functioning are as yet subject to controversy. Although it was suggested that left-handers are at higher risk of having language and reading deficits. Empirical data from clinical and nonclinical populations, indicating inferior achievements of left-handed native Hebrew speakers in studies of English as a foreign language. Clinical cases, however, are selected for language difficulties, and if these difficulties are associated with reduced or absent right shift, there should be excess non right-handers. School children classified for handedness did not differ on tests of ability, but in the same sample those with specific delays in learning to read were more often left and mixed-handed (Annett & Turner, 1974). Lucas, Rosenzvis & Bigler (1989) examined the relationship between handedness and language. Language ability was found to be significantly related to handedness, with an increased prevalence of left-handedness among those individuals with language deficits.

Keeping in view the literature review, following hypotheses were formulated:

1. The left-handers would perform low (Score high) on the measure of Visual-Motor Perception as compared to right-handers.

2. The left-handers would score high on arithmetic and low on reading and spelling sub-test as compared to right-handers.

METHOD

Sample

Sample of present research consisted of 99 students, 48 RHs (Male=16, Female=32) and 51 LHs (Male=16,Female=35). The age range of the participants was between 15-22 years with the mean age of 18 years. Their educational level was between grades 10 to 12.

Measures

1. ***Handedness Questionnaire (Coren, 1992)*** was used to screen out the hand preference (left / right) of participants.
2. ***Wide Range Achievement Test 3 (Wilkinson, 1993)*** is a tool to assess the achievement, focusing on the coding skills in three domains, i.e., reading (recognizing and naming letters, pronouncing printed words), spelling (writing name and writing letters and words from dictation), arithmetic (counting, reading numbers, oral and written computation).
3. ***Bender Gestalt Test (Bender, 1938)*** is a paper-pencil visual motor integration test that involves copying geometric designs. Scoring system of Pascal (1951) was used. Lezak (1983) found, Copying and drawing geometric designs is thought to be a right hemisphere function. It may be noted that high score on the test is suggestive of impairment in the area of visual motor perception.

Procedure and Statistical analysis

The entire sample was drawn from different educational institutes of Karachi. The researchers approached the subjects with the consent of authorities and selected the self reported left-handers and right-handers. After collecting the required personal information of the subject, the examiner administered the handedness Questionnaire (Coren, 1992) to screen out the hand preferences and then the Wide Range Achievement Test-3 (Wilkinson, 1993) was administered on the participants (spelling and arithmetic sub-tests were administered in group while reading sub-test was administered individually). After a break, Bender Gestalt Test (Pascal, 1951) was also individually administered. t-test was applied to calculate the differences in performance of subjects on measures of Visual-Motor Perception and Academic Achievement.

RESULTS

Table 1

The difference in performance of Left-handers and Right-handers on the measure of Visual Motor Perception (BG)

Handedness	N	Mean	Std. Deviation	t	df	Level of Sig
Left Handers	51	30.53	14.035	2.171	97	P< .05
Right Handers	48	24.96	11.158			

Table II
Difference in performance of Left-handers and Right-handers on the Sub-tests of Academic Achievement (WRAT 3)

Sub-test	Handedness	N	Mean	Std. Deviation	t	df	Level of Sig
Spelling	Left Handers	51	28.78	7.511	0.539	97	P> .05
	Right Handers	48	28.04	6.077			
Arithmetic	Left Handers	51	33.37	4.783	0.217	97	P> .05
	Right Handers	48	33.17	4.637			
Reading	Left Handers	51	35.55	7.666	-2.76	97	P< . 01
	Right Handers	48	39.65	7.064			

DISCUSSION

An analysis of the results indicates that there is a significant performance difference on the measure of visual motor perception between right and left handers ($t = 2.177$, $df = 97$, $p < .05$). These findings are consistent with the previous researches. Left-handers scored high on BG as compared to right-handers (table I) that indicate their comparatively weak visual motor performance, which reflect that left-handers are more prone to develop psychoneurological problems as compared to right-handers. Researches claimed that problems such as prenatal cerebral injuries, mental retardation, epilepsy, Down's syndrome, autism, learning disorders, dyslexia, migraine and allergy are more prevalent in the left-handed and ambidextrous population than in right-handers (Betancur, et al 1990; Geschwind & Behan, 1982; Laterr & Epstein, 1999).

Clinical and laboratory evidence suggests that certain human cognitive functions depend predominately on either the left or right hemisphere of the brain (Galin and Ornstein, 1972). Each hemisphere is specialized for a particular type of information

processing, for which it is dominant. The left hemisphere of well-lateralized right-handed individuals is thought to be specialized for processing stimuli, especially oral language, in terms of left to right sequence, details, and step by step analysis, and thought to be concomitant for speaking, reading, writing, and arithmetic. The right hemisphere is thought to be specialized for processing stimuli, especially Visuospatial, according to simultaneous and holistic patterns and relationships (Bradshaw and Nettleton, 1981; Springer and Deutsch, 1981; Bogen, 1975). Thus results of the present study appeared as partially consistent with the previous research findings.

Table II reflects that there is an insignificant difference between the performance of left and right-handers on spelling ($t = 0.539$, $df = 97$, $p > .05$) and arithmetic ($t = 0.217$, $df = 97$, $p > .05$). However there is a significant difference between the performance of left-handers and right-handers on the subtest of reading ($t = -2.760$, $df = 97, p < .01$). A number of researches supported the finding, as Webb (1983) found that the left-brain is the preferred brain in school learning, but a large percentage of students failing school prefer right brain learning. Right hemisphere dominant subjects have been found to be disabled readers (Gordon, 1980); poor readers (Ozzie and Zenhausern, 1981); more likely to be dyslexic (Hier, et al., 1978); and have more learning/behavior problems (Stellern, Marlowe and Cossairt, 1984).

Casey, Pezaris, & Nuttall (1992) also found that left-handed pupils significantly more than right-handers, were placed in lower level English classes and had more difficulties in applying orthographic-phonological mapping rules in reading English words and pseudowords. Results are inconsistent with the hypothesis that left-handers would score high on mathematics than right-handers. In accordance with major theories (Geschwind & Behan, 1984) of handedness and brain organization, differential predictors for math achievement were found as a function of sex and handedness subgroups among eighth graders. Although there was no difference found in absolute levels of performance as a function of sex or handedness, predictive structures did differ. Further research is thus recommended to analyze other related variables, which might play a part in the insignificance of results in the areas of mathematical and spelling achievement. Either sex differences or age could be the variable, which explains the contradiction of the findings from the past researches. Further studies with controlling these factors and with relatively large sample size would be of great value.

According to findings, the performance differences on the measures of visual motor perception and subtest of reading are significant and suggest that left-handers are poor reader than right-handers and they are also weak in visual motor performance. Both of these variables are contributing factors in dyslexia as suggested by Geschwind & Galaburda (1985) and Palmer & Corballis (1996), that the increased growth and dominance of the right hemisphere would cause excessive suppression of left hemisphere functions, which explains why some of right hemisphere abilities such as artistic aptitude

and Visuospatial abilities and left hemisphere functional disorders such as dyslexia are more common in left-handers than right-handers.

Additionally remarkable sex differences were observed in this study. Thus gender could be a related factor, which interfere and intervene the usual relationship, found between handedness and achievement. However, due to limited sample size of males in present study, it was not suitable to present these analyses. Further research is required to address this issue.

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LEVEL OF ANXIETY AMONG MARRIED AND UNMARRIED AFGHAN REFUGEES

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ABSTRACT

The present research was designed to study anxiety in refugees with reference to marital status. A sample of 200 adult Afghan Refugees residing in different refugee's Villages and urban refugee settlements of NWFP, Pakistan was taken. It was hypothesized that there will be a difference in the level of anxiety between married and unmarried Afghan refugees. IPAT Anxiety Scale (Self Analysis Form: Krug, Scheier and Cattel, 1976) was administered to see their level of anxiety. The results verified the hypothesis and it was found that married Afghan refugees possessed a higher level of anxiety than unmarried Afghan refugees. The research supports previous studies conducted in this regard reflecting the relation of marital status with level of anxiety.

INTRODUCTION

The social costs of two decades of civil war in Afghanistan have been enormous. More than one million civilians are believed to have been killed and countless others injured (Amnesty International, 1999). During the time of the Soviet occupation, over six million people fled the country. Although many returned after the Soviet withdrawal, there are still over two million Afghan refugees in Iran and Pakistan, making Afghans the largest single refugee group in the world. Inside the country, the infrastructure and institutions of state have been largely destroyed by the conflict. According to the United Nations the socio-economic conditions of the population are amongst the worst in the world. Healthcare is rudimentary and many are without access to basic healthcare provision. Thousands of children die from malnutrition and respiratory infections every year. Maternal mortality is one of the highest in the world. Literacy rates are extremely low and are estimated to have dropped to as low as four per cent for women. Afghanistan is ranked bottom of the United Nations' gender development index.

Today, many Afghan refugees live in a state of anxiety and uncertainty. They see little hope of an early return in safety and in dignity to their homes in Afghanistan, and yet there are findings that their presence in their countries of asylum is increasingly resented. Possessing few rights in their asylum countries and vulnerable to harassment and discrimination, Afghan refugees will continue to suffer abuses, dislocation and poverty whilst they wait for the warring parties in Afghanistan and the international community to ensure respect for humanitarian law and human rights, and effective protection for returnees.

Research shows a significant degree of psychological stress among refugees with relatively high levels of physical and psychological dysfunction (Lipson, 1993; Chung & Kagawa-Singer, 1993).

According to Lipson (1993) refugees is particularly vulnerable population that is at risk for mental health problems for a variety of reasons like traumatic experiences in and escapes from their countries of origin, difficult camp or transit experiences, cultural conflict, and adjustment problems in the country of resettlement, and multiple losses, family members, country, and way of life. Refugees are vulnerable to psychological distress due to uprooting and adjustment difficulties in the resettlement country, such as language, occupational problems, and cultural conflict. Uprooting creates culture shock, "a stress response to a new situation in which former patterns of behavior are ineffective and basic cues for social intercourse are absent". The culture shock or migration-stress hypothesis suggests that the greater the sociocultural difference between the country of origin and the country of migration, the more pronounced will be the stress and the resulting mental illness (Malzberg, 1955; Parker etal., 1969).

There is a rapidly growing, already considerable body of literature in clinical community, medical and applied psychology regarding the supportive functions of interpersonal relationships. In the main these findings suggest that social support is directly related to increased psychological well-being and to a lower probability of physical and mental illness. Thus the various types of support provided by interpersonal relationships play a crucial role in determining a person's general adaptive functioning and sense of well-being. Many studies have concentrated on the relationship between change (life events) and help (social support) suggesting that the latter buffers or protects against the former (Brown & Harris, 1978; Smith et al., 1978; Williams et al., 1981, & Monroe, 1983). Cobb (1976) defines social support as information telling the person that they are cared for, held in high esteem and a member of communication network with mutual obligations.

A spouse in this sense can be considered as a major source of social support in a person's life. Studies have shown that much of the depression and anxiety of refugees can be alleviated if they can keep family ties somewhat intact and can develop social networks with others from their culture (Beiser et al., 1989; Allden, 1997). However

other studies have also shown that while family can be a valuable source of emotional support, immigrant families can also be too overwhelmed by their own immigration demands to provide support or can generate additional stress for their members (Aroian, et al., 1996).

Researchers have learned more about the ways in which friendship groups, the quality of friendship and the state of marriage impact on a person's physical and mental health (Gottlieb, 1981, 1985; Cobb & Jones, 1984; Reis, 1984).

Aroian (1998) explained the impact of demographic variables (age, gender, marital status, education, employment, length of time in the United States) and immigration demands (novelty, occupation, language, discrimination, loss and not feeling at home) were predictors of psychological distress in a sample of 1,647 former Soviet immigrants. Findings obtained through multiple regression analysis indicated that the combined model of demographic and demand of immigration variables were highly significant.

The objective of the current study was to explore the difference in the level of Anxiety between married and unmarried Afghan Refugees. The hypothesis formulated for this study was " There will be a significant difference in the level of anxiety between married and unmarried Afghan refugees".

METHOD

Sample

The sample consisted of 200 adult Afghan Refugees. These included both married (N=100) and unmarried (N=100) refugees. The sample was taken from Urban Refugees Settlements and Old Refugees Villages of Peshawar, Hangoo, Kohat, Kurram and Haripur areas of NWFP, Pakistan. Purposive Sampling Technique was used.

Procedure

Researcher individually approached the participants. They were residing in different Urban Refugee Settlements and Old Refugee Villages of Peshawar, Hangoo, Kohat, Kurram and Haripur areas of NWFP. Elder refugees facilitated the research procedure. The respondents were usually the teachers of different schools established for refugees in order to meet the requirement of questionnaire and sampling.

Demographic information including ethnicity, gender and marital status was collected after establishing satisfactory level of rapport with them. The IPAT Anxiety Scale (Self Analysis Form; Krug, Scheier & Cattel, 1976) was then administered to assess the level of anxiety. The respondents were told that it was a general mental health

test. Both the subjects and the elders who facilitate data collection were thanked a lot for their cooperation.

RESULTS

Table 1

Means, standard deviations and t-value of covert scores of married and unmarried Refugees on IPAT Anxiety Scale

Group	N	M	SD	t-value
Married	100	15.86	4.45	6.242
Unmarried	100	12.32	3.51	

P< .000

Table II

Means, standard deviations and t-value of overt scores of married and unmarried Refugees on IPAT Anxiety Scale

Group	N	M	SD	t-value
Married	100	15.95	4.84	5.968
Unmarried	100	12.58	3.51	

P< .000

Table III

Means, standard deviations and t-value of anxiety scores (overall) of married and unmarried Refugees on IPAT Anxiety Scale

Group	N	M	SD	t-value
Married	100	31.81	8.70	6.400
Unmarried	100	24.90	6.40	

P< .000

DISCUSSION

The table I show highly significant difference between Married and Unmarried refugees on IPAT Anxiety Scale by Covert Scores (t=6.242, p< .000). The figures show that Married refugees have more anxiety (M=15.86, SD=4.45) as compared to Unmarried refugees (M=12.32, SD=3.51). Table II shows highly significant difference between married and unmarried refugees on IPAT Anxiety Scale by Overt Scores (t=5.368, p<. 000). The figures show that Married refugees have more overt anxiety (M=15.95, SD=4.84) as compared to Unmarried refugees (M=12.58, SD=3.51). Table III shows highly significant difference between Married and Unmarried refugees on IPAT Anxiety Scale by Anxiety Scores (t=6.400, p<.000). The figures show that Married refugees have more overall anxiety (M=31.81, SD=8.70) as compared to Unmarried refugees (M=24.90, SD=6.40).

The difference in anxiety level between Married and Unmarried Refugees can be connected with the greater responsibilities of married persons making them more prone towards anxious tendencies. Further the marital satisfaction would be an important factor related to mental health. As the status of refugees might interfere in marital relationship and might cause some distress. Burgess (1981) found that the variables most associated with life satisfaction are relational variables like marital happiness rather than socioeconomic factor. Thus the nature of relationship is important to study in future research.

As Aorian (1998) pointed out some other demographic variables along with the marital status, as predictors of psychological distress. The most important of them is the gender. Men benefits more in traditional marriage. Marriage or being married tends to be associated in men with decreased rates of suicide and a higher health status (Bernard, 1972). Thus more detailed analysis considering the other demographic variables will be more informative in future research.

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A COMPARISON OF RESPONSES ON HUMAN FIGURE DRAWING OF ORPHAN AND NON-ORPHAN CHILDREN

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ABSTRACT

The aim of the present study was to explore the difference in the level of intellectual maturity and emotional disturbance between orphan and non-orphan children. On the basis of literature review it was hypothesized that the "Orphan children would be more prone to emotional disturbance as compared to non orphan children" and " The level of intellectual maturity of orphan children would be low as compared to non-orphan children". In order to test the hypotheses, a sample of 241 school going children, consisting of 120 orphan children and 121 non-orphan children, including 124 females (non orphan 63and orphan 61) and 117 males (non-orphan 58 and orphan 59) were selected from different orphan organizations and schools of Karachi. Parental loss duration was at least two years for orphan children. The age range of sample was between 5 to 12 years and their minimum educational level was grade one. The entire sample belonged to lower socioeconomic class. The Human Figure Drawing (Koppitz, 1968) was administered to assess the level of intellectual maturity and emotional disturbance. In order to interpret the results in statistical terminology, t- test and descriptive statistics were computed. Results were consistent with the hypotheses, i.e. there are more orphan children (73.83 %) who score high on emotional indicators as compared to non-orphan children (55.37 %). Further, orphan children were found to be less intellectually mature as compared to non-orphan children (t= -4.077, df =239, p< .001).

INTRODUCTION

Definitions of orphans, which vary from country to country, have since been formulated. In some countries if a breadwinner dies, who usually is the male, then the children are called orphans. In yet others if a mother died because mothers are very important in the African culture, the children are defined as orphans. Most countries however agree that where both parents die the children are considered definite orphans (Botswana Human Development Report, 2000). Early in the 20th century, leaders in childcare expressed the view that family care is preferable to orphanage care of needy children. McCall (1951) reported that Anna Freud believed the absence of a close, continuous relationship with a caring mother, or surrogate, spells doom for the psychological well being of the infant. In layman terms, theorist argue that "mother-child bonding" is a necessary step toward developing a sense of trust in others, self-confidence, and a sense of right and wrong. This bonding process is assumed to overlay unconscious ego and superego developments, necessary for later psychological health.

The family is both the earliest and the most sustained source of social contact for the child. In the early years the sole relationship available to the child are often those with parents. The interaction and emotional relationship between infant and parents shape the child's expectedness and responses in subsequent social relation. It is generally recognized that lifelong patterns of behavior, values, goals and attitudes of children are strongly associated with the characteristics of their parents especially as these are expressed in child rearing and family life styles. Although later experiences out sides the home also have important influences on the developing child. The availability of these experiences and ways in which they uses them are strongly affected by what he has learned in his home (Chilman, 1966). The family has also been shown to influence many aspects of behavior, development of sex-roles, self-concept and interpersonal and intellectual skills (Hall, 1986). The family especially parents are thus the main source of mental and emotional health in society and in its members.

Birtchnell (1970) in reviewing studies that explored the relationship between parental death and mental illness find it noteworthy that the studies indicates a positive correlation between early parents death and mental illness, and tend to suggest that early childhood is the most critical period for loss to occur.

The loss of parental guidance will make it more difficult for children and adolescents to reach maturity and to be successfully integrated into the society. The illness and the loss of the parents are stressing and often traumatic for the child; it is accompanied by deep emotional suffering. The loss of consistent nurture and the physical child neglect can produce serious development problems (Madorin, 1998).

Madorin (1999) further states, that many children manage the tasks of mourning in a healthy way. Nevertheless, the "Child Bereavement Study" found that during the first 2 years after the death of the parent, about one third of the children were found to be at some degree of risk of high levels of emotional and behavioral problems.

Leibman (1992) discussed that how the trauma of losing parents through death, divorce or neglect, shatters people's feelings of security, adequacy and worth; and leaves psychological scars that never completely heal. When children perceive themselves to be abandoned, feelings of inadequacy and self-devaluation develop. While the effects of abandonment vary with the particular sensibilities and vulnerability of the child. Many children experiences loss of parents, show disruptions in normal personality development. Cochinwala (1990) observed negative effects of loss of mother in early childhood on the personality in adults. Caplan and Douglas (1969) in their study found higher incidence of depressed mood, phobic disorders and school refusal among children bereaved of parents than among other clinic attendees. Further, year after bereavement, children still had withdrawn behavior, minor depressive symptoms and a decrease in school performance.

Foster and Williamson (2000) report sadness as expected response in case of parental loss. It might bring frequently sad feelings and feelings of loneliness. Anxiety can appear as the fear, losing another loved one (which is very rational and probable when the first parent died) or as a concern with the child's own safety. Many children do feel fearful, but significantly more so a year after the death than right away. Anxiety was highly associated with an increased number of changes and disruptions in daily life, and with feelings to have less control over one's circumstances. Guilt is a common feeling after the death of a loved one. Guilt mostly takes the form of regrets of things done or not done. In particular, small children aged 4-6 years may sometimes think that the disappearance of the parent has something to do with their own behavior, that something they did or said, caused mother/father to leave them, which can produce profound feelings of guilt.

The stress of dealing with the loss of a beloved person often has consequences for the health status. Somatic symptoms as headache, pain in the back or the stomach does not necessarily reflect an illness. So, to suffer really from headaches may be just another expression of pain. Feelings of abandonment often produce anger. Anger is an almost universal response to loss. Children, who have anger at being deprived as a result of loss, may act as if the world owes them, yet nothing is good enough to please them (Foster and Williamson, 2000).

If it is not possible to work through and to acknowledge these feelings, this emotional energy will manifest in other ways, perhaps as headache or problems of the stomach, or as behavioral problems or as aggression etc. It seems that children between ages of 5 and 7 years are a particularly vulnerable group. This may manifest itself in

nightmares, high levels of anxiety etc. In most cases, the death of the mother results in more daily changes than the death of the father. These changes significantly effect the child's emotional outlook and create major disruptions to which the child must adapt. This adjustment extends over a long time until adulthood (Madoria, 1999).

The age of the child has a clear impact on the child's adaptation to loss. Younger children (up to around 11 years) have less well-developed skills of understanding the context of events. This influences their ability to understand death and to cope emotionally with the loss (Foster and Williamson, 2000). So if the child is mentally able to think and to reason about something, which is not present, the child is also able to think and to reason about the late mother or father. Most children have developed these mental and cognitive capacities to reason by around 3 or 4 years of age (Madoria, 1999).

Spitz (1945), assert that how much damage can be done to infants who are separated from their mothers when no satisfactory substitute is provided which results in primary stunting of emotional and physical growth because of lack of love, attention and stimulation. He further commented on the emotional and physical regression of infants in a foundling home, which he believed resulted from maternal separation. Nagy (1959) said that children tend to intensify the feeling of loss and intensify inferiority feelings, loneliness and sadness.

Empirical support came from the clinical studies of William Goldfarb (1943) who tested small groups of adolescents from one New York City orphanage. His reports of serious deficiencies with speech, intellect, personality, and social development were widely circulated among social work professionals. Other scholars in England and the U.S reported similar problems.

Intelligence or related cognitive skills are widely reported to suffer from orphanage experience. In one of the most substantial studies, Trotzkey (1930) compared orphanage and foster care children. Data on IQ scores, using either group tests or the individually administered Stanford-Binet, showed the Chicago orphanage samples scored in the average range, the same as children in New York City elementary schools. The orphanage samples were slightly lower than the comparison groups but well in the average range. However, Goldfarb (1943) included IQ test with tests for speech, educational achievement, and personality, compared orphans with foster care children. The former scored below average on a standardized intelligence test while the later scored close to average. Only three of the fifteen orphans showed average language skills while most of the foster youth did. Educational achievement, ratings for social maturity, and other measures showed the orphan sample to be immature and underachieving.

As result of parental loss many theorist and researcher considered the emotional and behavioral aspect of orphan but still in the present era there is lack of attention on the

aspect of cognitive development especially maturity level of such children. The gap in the knowledge grasps our attention to highlight this dimension of picture. This exploratory study may appeal other researchers to explore and analyze other aspects of the personality and issues of mental health related to orphan children.

Keeping in view the presented literature, the purpose of this research is to explore the difference in the level of intellectual maturity and emotional disturbance between orphan and non-orphan children. Human figure drawing test is a measure, which supposed to tap these aspects. Intellectual maturity is thus in this research assumed as the intelligence quotient of children calculated by the ratio of mental age (obtained from developmental items of HFD), and chronological age of the child. However, the children who score more than two on emotional indicators are supposed to have emotional disturbance. It is therefore assumed that orphan children are more prone toward emotional disturbance and thus as compared to non-orphan children there would be more orphan children who score 2 or more on emotional indicators of Human Figure Drawing. Further, they are also assumed to be low on developmental items of Human Figure Drawing as they are supposed to have low intellectual maturity as compared to their counterparts.

METHOD

Sample

Sample of the research consisted of 241 school going children including 120 orphan children and 121 non-orphan children having approximately equal number of both sexes in each group (see table 1). In the present research orphan were those children who had lost their single or both parents and duration of loss was at least two years, while the other group who have both of their parents alive, was considered and termed as non orphan children. The age range of sample was from 5 to 12 years, with minimum educational level of grade one. All the participants were belong to lower socioeconomic class. The Sample of orphan was selected from different orphan organizations. Only those children were taken who were in these organizations since at least one year. Non-orphan children were taken from regular schools located in different areas of Karachi.

Procedure

The entire sample was approached through different organizations (for orphan children) and regular schools (for non orphan children) of Karachi. Consent was taken from all these organizations and schools. Data has been collected from subjects individually and their participation was on volunteer basis. Matter of confidentiality was

assured. After the development of rapport, children were required to respond on a demographic data form. Then they were provided a blank sheet (paper size 8 ½ x 11) and pencil with an eraser to draw a person. Before drawing they were instructed, "On this piece of paper, I would like you to draw a "whole" person. It can be any kind of a person you want to draw, just make sure that it is a whole person and not a stick figure or a cartoon figure". 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
Demographic Characteristics of sample

Groups		Gender		Parental Loss	
		Male	Female	Single	Both
Orphan	Frequency	59	61	88	32
	%	49.16	50.84	73.33	26.67
Non- Orphan	Frequency	58	63	-	-
	%	47.94	52.06	-	-

Table II

Frequencies and percentages of different emotional indicators on HFD's of orphan and non-orphan group

Sr.No	Emotional indicators	Orphans		Non-Orphans	
		Frequency (N= 120)	Percentages	Frequency (N= 121)	Percentages
1	Integration	92	76.66	50	41.32
2	Shading face	9	9.09	2	1.65
3	Shading body	2	1.66	3	2.47
4	Shading hands	1	0.83	2	1.65
5	Asymmetry	35	29.16	40	33.05
6	Slanting figure	4	3.33	2	1.65
7	Tiny figure	1	0.83	0	0.00
8	Big figure	1	0.83	4	3.30
9	Transparency	11	9.16	12	9.91
10	Tiny head	2	1.66	0	0.00
11	Crossed eyes	15	12.5	10	8.26
12	Teeth	12	10.0	9	7.45
13	Short arms	36	30.0	15	12.39
14	Long arms	7	5.83	15	12.39
15	Arms cling to the body	13	10.83	4	3.30
16	Big hands	1	0.83	1	0.82
17	Hand cut off	7	5.83	4	3.30
18	Legs together	0	0.00	2	1.65
19	Genitals	2	1.66	0	0.00
20	Monster	5	4.16	1	0.82
21	Three figure	1	0.83	0	0.00
22	Clouds	2	1.66	0	0.00
23	No eyes	0	0.00	0	0.00
24	No nose	10	8.33	10	8.26
25	No mouth	4	3.33	1	0.82
26	No body	4	3.33	0	0.00
27	No arms	5	4.16	5	4.13
28	No legs	4	3.33	5	4.13
29	No feet	8	6.66	6	4.55
30	No neck	27	22.50	25	20.66

Table III
Percentages of Orphan and Non-orphan children for the number of Emotional Indicators Scored

Emotional indicators scored	Orphan		Non-orphan	
	Frequency	Percentages	Frequency	Percentages
0 – 1	29	24.16	54	44.62
2 or more	91	75.83	67	55.37

Table IV
Difference between Orphan and Non-orphan children in the level of intellectual maturity

Group	Sample size	Mean	Std. Deviation	t	Sig. Level
Orphan	120	96.9678	24.7596	- 4.077	0.000
Non-Orphan	121	111.8293	31.4071		

DISCUSSION

Results were consistent with the hypotheses, i.e., as compared to non-orphan children (55.37%) there were more orphan children (75.83%) who have scored 2 or more on emotional indicators (Table III). Their level of intellectual maturity was also found to be low as compared to non-orphan children ($t = -4.077$, $p < .001$).

The presence of only one Emotional Indicator on HFD appears to be inconclusive and is not necessarily a sign of emotional disturbance, two or more Emotional Indicators on a HFD are highly suggestive of emotional problems and unsatisfactory interpersonal relationships. The emotional Indicators on HFD's are believed to reflect a child's attitudes and concerns just as his overt behavior and symptoms reveal much of his underlying attitudes, concerns and anxieties (Koppitz, 1968). Thus a fair proportion of orphan children took lead to their counterparts, while having the score of two and more than two, and confirms the assumption that orphan children would be more emotionally disturbed than other children of their age.

More detailed analysis of the emotional indicators on which subjects scored, reveals that orphan children score high as compared to non orphan on the items of 'integration', 'short arms', and 'arms clinging to body'. These items scoring reflect instability, effort to inhibit one's impulses, and difficulty reaching out in the world and towards the others. Especially arms clinging to the body reflects rigid inner control. The tendency thus confirms the Maderin's view (1990), that such children are at some degree of risk of high level of emotional and behavioral problems. Reason seems to be obvious as family is both the earliest and the most sustained source of social contact for the child. These early years are very crucial for the personality pattern, attitude and other concern of the children and in these early years the sole relationship available to the child are often those with parents and with other family members. The interaction and emotional relationship between infant and parents shape the child's attitude, concern and infact to very extent, personality pattern in long term. Chilman (1966) reported that lifelong patterns of behavior values, goals and attitudes of children are strongly associated with the characteristics of their parents especially as these are expressed in child rearing and family life styles. It does not mean that later experiences out side the home doesn't have any influence on the process of child development but children are strongly affected by what they had learnt in their home. The family, especially parents are thus the main source of mental and emotional health in society and in its members. Especially mother child relationship is necessary in developing a sense of trust in others and self-confidence. The unhealthy environment of orphanages along with the loss of parents is stressful and often traumatic for the child; thus it is accompanied by deep emotional suffering. Regarding parental loss many researcher (As mentioned in introduction section) reported emotional and behavioral problems like poor self-perception, sadness, crying, and feelings of loneliness, anxiety, insecurity, somatic symptoms, aggression, phobic disorder and depression.

However an interesting finding appears is that non-orphan children score high on 'asymmetry' and 'long arms', which are thought to be associated with the aggression, impulsiveness and an aggressive reaching out toward the environment. It is also thought to be associated with the ambitions for achievement and acquisition. However these differences would be informative and important to study in future research separately, while controlling the age.

Further statistical analysis in the table IV reflects that orphan children scored high on developmental item as compare to non-orphan children ($t = -4.077$, $p < .001$). Result reveals that with out parental guidance i.e. loss of parents it become more difficult especially for children to reach cognitive maturity and to be successfully integrated into the society. As discussed earlier, Hall (1986) found family as the source of influence on intellectual skills as well as on many aspects of behavior, development of sex-roles, self-concept and interpersonal skills.

Several interpretations and rationale can be given to the trauma faced by the children who are separated from their mothers/both parents when no satisfactory substitute is provided. Primarily there is stunting of emotional and physical growth because of lack of love, attention and stimulation. These children are under nourished and they lack quality of time, and emotional support by the parents as compare to non-orphan children. Beside that, the level of emotional and social exposure is also very limited to these children which is very crucial for the development in all areas. These children also have early deprivation due to lack of parental attachment. Within the attachment theories perspective, the academic achievement and cognitive development is ascribed with the feeling of security, and parentchild bondage as one of the predictor of academic achievement, emotional and cognitive maturity, which is inadequately developed in orphan children. Orphan children were taken from orphan organizations who have limited exposure and environmental opportunities especially in our society which may lead to limited cognitive exposure, limited communication and limited comprehension i.e. limited understanding/awareness of the environment as compare to those children who receive parental and family support in all dimensions. Keeping in view the above-mentioned factors, it can be concluded that absence of parent-child bondage is strong indicator for under development of cognitive and emotional maturity in orphan children residing in orphan homes.

Considering the presented facts this study highlight the emotional problems, and cognitive maturity aspect of orphan children. It also reflect the need for further researches in the related area, with special reference to gender, education and age, as well as with other psychological dimensions.

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SUICIDE PROBABILITY AND DEPRESSION AMONG MALE PRISONERS

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ABSTRACT

The present research was conducted in order to assess the differences among unconvicted and convicted male prisoners on the variables of suicide probability and depression. After detailed literature review it was hypothesized that the unconvicted prisoners would have higher Suicide Probability and Depression as compared to convicted prisoners. The sample consisted of two groups (20 unconvicted prisoners and 20 convicted prisoners) recruited from Sukkur Jail. The age range of both the groups was from 25 – 40 years. Suicide Probability Scale (SPS, Cull & Gill, 1988) and Beck Depression Inventory (BDI, Beck, 1961) were administered in order to determine Suicide Probability and Depression respectively in unconvicted and convicted prisoners. t-test was calculated in order to see the differences in suicide probability and depression between unconvicted and convicted prisoners. Results showed unconvicted prisoners scored higher on Suicide Probability (t= 3.591,p< .05, df=38) and on Depression (t= 2.542, p< .05, df=38) as compared to convicted prisoners.

INTRODUCTION

It is hard to imagine living in an environment where one has little control or influence, where one is forced to live with, and feel himself to be at the mercy of other prisoners, where one is forced to rely entirely on the integrity of the staff, where one feels there is no privacy, where apparently trivial feels overwhelming, where one is deprived

of normal family contacts and where scope of choosing what he does at any time is severely restricted or denied altogether (Office for National Statistics, 1998).

The effects of custody can be very destructive. Prisons contain those serving sentences, awaiting trial (remand prisoners) and awaiting sentencing (Shaw, Baker, Isabelle, & Molony, 2004). Prisons are unremittingly grim places that provide conditions wholly unsuitable for those with severe mental disorders. Mental health problems are the most significant cause of morbidity in prisons. Prison can exacerbate severe and chronic mental illness. Brutality and overcrowding can also affect inmates, even if they had no prior history of mental illness. Many people become depressed and suicidal in prison. Prison cannot only deteriorate existing mental conditions, but can cause breakdowns in previously sane prisoners (Kupers, 1999).

Mental Health is the emotional and spiritual resilience which enables us to enjoy life and to survive pain, disappointment and sadness. It is a positive sense of well-being and an underlying belief in our own, and other's dignity and worth (Office for National Statistics, 1998). Literature review has shown the prevalence of mental disorders, like psychosis, delusional disorder, and depression etc. among prison population. Boothby and Durham (1999) conducted a survey on the prisoners. 1,494 prisoners completed the Beck Depression Inventory (BDI). It was found that generalized feelings of depression are common among prisoners.

Prisoners who have been sentenced or who are on remand have been found to have higher rates of mental illness than the general population. As many as 90 % of prisoners have a diagnosable mental health problem, substance abuse problem or both. Another survey in England and Wales showed a high prevalence of mental disorder among prisoners (Singleton, & Meltzer, 1998). However remand prisoners experience higher rates of depression than sentenced prisoners (Office for National Statistics, 1997).

Someone who is depressed often feels helpless to solve his or her problems, which leads to hopelessness. Depression leads to intolerable, unending, excruciating emotional pain. At some point, suicide seems like the only way out of the pain and suffering. 90% of suicide completers have a depressive illness (Lester, 1998).

Emile Durkheim, a French sociologist provides four theories of suicide for the general population. 1) Egoistic -- when a person is too weakly integrated into society, such as a person living alone in poor section of a city 2) Altruistic -- when a person is too strongly integrated into society, such as "soldier falls on grenade to save other soldiers" 3) Anomic suicides -- the social regulation is so weak that it does not control the person - "alienated adolescent who feels deeper that his desires can never be gratified by society" 4) Fatalistic -- the social regulation is too strong - people commit suicide as method of escaping from "bonds of society" such as slaves in past. Prisons are considered a deviant

type of society where social regulation is extremely high, and some prison suicides would be categorized as fatalistic (Lester & Danto, 1993).

The belief that imprisonment and punitive regimes will cure crime and make society safer misjudges the impact of custody. The prison population includes many groups at high risk of suicide. Suicide continues to be the leading cause of death in jails, where over 400 inmates take their lives each year; the suicide rate in detention facilities is approximately nine times greater than that of the general population (Hayes & Rowan, 1988). On the other hand, suicide ranks third as a cause of death in prisons (Bureau of Justice Statistics, 1993).

Many other studies have addressed the problem of suicide in prisoners. Bilks and Dalton (1999) found that the remand and reception are periods where prisoners are more likely to commit suicide and death rates are higher in prisons that have remand and reception prisoners rather than long-term prisoners. Backett (1987) also found that prisoners on remand are the highest risk group.

Suicide is the leading cause of death in jails and the third leading cause of inmate deaths in prisons, behind natural causes and HIV/AIDS. Several factors have been found to correlate with prison suicides, including the security of the facility, the crime committed to cause the inmate's incarceration, and the inmate's phase of imprisonment. Inmate-related factors in suicide risk include feelings of depression and hopelessness, mental disorders, suicidal thoughts, and pre-incarceration suicidal behaviors (Sattar, 2001).

Bonner (1992) offered the "stress-vulnerability model," the theory that suicide must be viewed in the context of a process by which an inmate is (or becomes) ill equipped to handle the common stressors of confinement. As the inmate reaches an emotional breaking point, the result can be varying degrees of suicidal intention, including ideation, contemplation, attempt, or completion. Initially, these stressors mirror those of jail suicide victims, such as fear of the unknown and isolation from family, but over time:

> *...incarceration may bring about added stressors, such as loss of outside relationships, conflicts within the institution, victimization, further legal frustration, physical and emotional breakdown, and a wide variety of other problems in living. Coupled with such negative life stress, individuals with psychosocial vulnerabilities (including psychiatric illness, drug/alcohol intoxication, marital/social isolation, suicidal coping history, and deficiencies in problem-solving ability) may be unable to cope effectively and in time may become hopeless (Bonner, 1992).*

In addition to hopelessness, other risk factors for suicidal behavior are current degree of suicidal ideation and previous attempts, dysfunctional assumptions, dichotomous (all-or-nothing) thinking, inability to solve problems and a view of suicide as the desirable solution to one's problems, psychiatric disorders, substance abuse, and availability of something to commit suicide (Weishaar & Beck, 1992). Such factors, in combination or interaction with the common stresses of confinement, could break down the ability to cope and create the emotional avenue for suicidal behavior.

A national clinical survey in Manchester based on a 2-year sample of self-inflicted deaths in prisoners by Shaw and his associates (2004) found that there were 172 self-inflicted deaths; 85 were of prisoners on remand; 55 occurred within 7 days of reception into prison. A total of 110 had a history of mental disorder. The most common primary diagnosis was drug dependence. Eighty-nine had symptoms suggestive of mental disorder at reception into prison.

The present research is investigative in nature, which intends to inquire if there is any difference between unconvicted and convicted prisoners on the variables of suicidal probability and depression.

Keeping in view the literature review following hypotheses were formulated:

1. The unconvicted prisoners would have higher Suicide Probability as compared to convicted prisoners.

2. The unconvicted prisoners would have higher Depression as compared to convicted prisoners.

METHOD

Sample

The sample of the present research consisted of two groups (20 unconvicted male prisoners and 20 convicted male prisoners). The sample was drawn from Sukkur jail, Sukkur, Sindh. The ages of the participants in both samples ranged from 25 to 40 years. Their education level was at least primary. The type of crimes committed by the prisoners included murder, robbery, attempt to commit robbery, theft, violation of property, fraud (property), associated to a gang (habitually commit theft) and narcotics. The length of imprisonment of unconvicted prisoners was at least 1 month and convicted prisoners were in jail for at least six months.

Material

Demographic Data Sheet

Demographic information was obtained through items which focused on subject's sex, age, education, date of being sentenced, duration of imprisonment and type of crime.

Suicide Probability Scale

Suicide Probability Scale (Cull & Gill, 1988) was administered in order to assess suicide probability among unconvicted and convicted prisoners.

Beck Depression Inventory

Beck Depression Inventory (Beck, 1961) was used in order to measure the depression in unconvicted and convicted prisoners.

Procedure

The entire sample was drawn from Sukkar jail Sukkar, Sindh. It consisted of two groups (20 unconvicted male prisoners and 20 convicted male prisoners). Only those prisoners were included whom superintendent provided. The purpose of the research was explained to the authorities of jail and consent was taken. After their permission rapport was established with the participants in order to reduce their anxiety. They were informed about the purpose of the study and were assured that the data will purely be used for research and their identities will not be revealed to anyone. Once the rapport was established they were interviewed and examiner filled in the demographic data sheet containing personal information. Then Suicide Probability scale (SPS, Cull & Gill, 1988) was administered on the participants in order to assess suicide probability in them. After an interval of 10 minutes Beck Depression Inventory (BDI, Beck, 1961) was administered to measure depression among unconvicted and convicted prisoners.

Scoring and Statistical Analysis

After data collection both scales were scored according to the standard procedure of manuals. t- test was applied to determine the differences between unconvicted and convicted prisoners on the variables of suicide probability and depression.

Operational definition of various terms

Unconvicted prisoners

Unconvicted prisoners are those who are awaiting trial (remand prisoners) and awaiting sentencing and are on remand from at least 1 month.

Convicted prisoners

Convicted prisoners are those who are serving sentences and are in jail from at least last 6 months.

Suicide Probability

Suicide Probability is an individual's self-reported attitude and behaviors, which have a bearing on suicide risk.

Depression

Characteristics, attitudes and symptoms, which appear to be specific to depressed patients and which are consistent with descriptions of depression contained in the psychiatric literature (e.g., increase or decrease in sleep and appetite, body image, work difficulty, weight loss, somatic preoccupation, etc.).

RESULTS

Table 1

The Comparison of Unconvicted Prisoners and Convicted Prisoners on the Variable of Suicide Probability

Groups	N	Mean	Std. Deviation	t	p
Unconvicted Prisoners	20	71.30	18.979	3.591	0.001
Convicted Prisoners	20	56.95	16.653		

P< .05, df = 38

Table II
The Comparison of Unconvicted Prisoners and Convicted Prisoners on the Variable of Depression

Groups	N	Mean	Std. Deviation	t	p
Unconvicted Prisoners	20	34.05	9.047	2.542	0.013
Convicted Prisoners	20	25.45	5.735		

P< .05, df = 38

DISCUSSION

The prison environment and the rules and regimes governing daily life inside prison can be seriously detrimental to mental health. Mental health of prisoners is a particular concern. Prisoners are predominantly socially disadvantaged group in whom the suicide rate has increased in society generally (Department of Health, 2002). Previous researches have tended to focus on the remand population, who are thought to be at greater risk, compared with both the sentenced population and general population (Bevcolin, Taylor, Gunn, & Maden, 1996). Remand can be a particularly stressful experience due to the level of uncertainty, the proximity of the offence, the experience of the prison environment which is often characterized by overcrowding, staff shortages, changes in the prison population, and also the stress of being away from family and friends (Office for National Statistics, 1998).

An analysis of results (Table I) indicates that unconvicted Prisoners have higher Suicide Probability as compared to convicted Prisoners. These findings are consistent with the previous research that has shown that suicidal ideation, plans and attempts were all more common among reception prisoners (Butler & Allnutt, 2003).

Further findings seem consistent with the hypothesis formulated regarding the difference between scores of unconvicted and convicted prisoners on BDI. It is found that unconvicted prisoners scored high on Depression as compared to convicted prisoners (Table II). These findings are supported by the research done in past.

Brooke and his associates (1996) found that 63 % of the remand population is thought to have some form of psychiatric disorder, 38 % had symptoms of substance misuse, and 26 % had some form of neurotic illness. Teplin and Swartz (1989) in his study for screening for mental disorders in jail found that 56% of males and 30% of female were recommended for referral for major depression, 20% of females and 12% of males required referral for manic-depression, and 33% of females and 18% of males required referral for schizophrenia. A meta analysis by Fazel and Danesh (2002) of sixty-two prison mental health surveys found that inmates were substantially more likely to have a psychotic illness, major depression, and a personality disorder than the general population.

The initial phase of imprisonment is the most vulnerable time (but "some suicides occurred many years after reception into prison"). A high proportion of violent and sex offenders are among those who commit suicide, and a history of psychiatric problems is common (Dooley, 1997).

The prevalence of important risk factors for suicide, such as mental illness and drug and alcohol misuse, is higher in prison than in the community (Jenkins & Meltzer, 1995; Singleton etal, 1998). Prisoners who attempt suicide attract multiple diagnosis such as personality disorder, psychosis, hazardous drinking, drug dependence and neurosis. Almost 70% of male remandees who had attempted suicide in the previous year attracted three or four diagnosis (Meltzer et al., 1999). The prison environment itself may increase suicide rate. More than 90 % of people who commit suicide are judged to have had a psychiatric disorder at the time of suicide, as ascertained retrospectively (Liebling, 1994).

Family problems, the denial of parole, transfer or appeal, fear of other prisoners, substance abuse and mental health problems are the most common hypothesized motivating factor for suicides and the majority of suicides are committed in the first six months after transfer from other prisons and institutions, the prisoners who commit suicide are more likely to be imprisoned for the most serious offences (Lainbos, 1997).

It is concluded that the prison population are experiencing significant mental health problems. This highlights the need for the Prison Service to consider further ways of addressing the mental health needs of prisoners, and to review current provision around mental health needs within the prison setting. This may involve extending the role of professionals such as psychologists, psychiatrists, psychiatric nurses, and social workers, as well as that of prison officers who engage with prisoners on an everyday basis.

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SOCIAL ANXIETY, SOCIAL CONFIDENCE AND EMBARRASSMENT: A CORRELATIONAL STUDY

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ABSTRACT

The present correlational research aimed to see the relationship between Social anxiety, confidence and embarrassment, which have long been considered to be correlates of each other against the complex backdrop of social interaction. The sample consisted of 154 graduate and post-graduate students, out of which there were 76 males and 78 females. To measure level of social anxiety and social confidence, the Khalique et al. (2003) Social Anxiety and Social Confidence scale was used, and to measure Embarrassability, the Kelly and Jones (1997) Susceptibility to Embarrassment scale was used. Over all analysis using the Pearson's Product-moment coefficient indicated a highly significant positive correlation between Social Anxiety and Embarrassment at $p < 0.001$, and highly significant negative correlations between Social Confidence & Embarrassment, and Social Anxiety & Social Confidence at $p < 0.001$. On sub-analysis by gender, results showed that in females a highly significant negative correlation was found between Social Anxiety and Social Confidence at $p < 0.001$, whereas in males this correlation was significant at $p < 0.01$. Similarly, the negative correlation between Social Confidence and Embarrassment between females was found to be significant at $p < 0.01$ and at $p < 0.05$ in males. The positive correlation between Social Anxiety and Embarrassment in both males and females was found to be highly significant at $p < 0.001$.

INTRODUCTION

The word anxiety is derived from the Latin word *anxietas*, from *angere*, which means to press tightly (Oxford, 2004). According to the Oxford Dictionary of Psychology (2001), anxiety is defined as a state of uneasiness, accompanied by dysphoria and somatic signs and symptoms of tension, focused on apprehension of possible failure, misfortune or danger. The Chambers English Dictionary defines anxiety as a state of being anxious or a state of chronic apprehension as a symptom of mental disorder. It has also been defined as an emotional condition in which there is fear and uncertainty about the future. Anxiety is something we all experience from time to time. Most people can relate to feeling tense, uncertain, and perhaps even fearful with the thought of taking an exam, going to hospital, attending an interview or starting a new job. It maybe a sense of worry about feeling uncomfortable, appearing foolish or how successful you will be. In turn these worries can affect an individual's sleep, appetite and ability to concentrate.

Short-term anxiety can be useful. For instance, feeling nervous before an exam can make one feel more alert and enhance performance. On the flip side however, if the feelings of anxiety are so strong that they become overwhelming, the individual's capacity to perform, concentrate and do well may suffer. It may be surmised that anxiety acts as the mechanism to protect the body against anything or situation perceived by the self as stressful or dangerous. Examples of such situations can be, meeting new people, public speaking, giving a driving or any other test and having an injection (Information booklet,2004).

Anxiety is ubiquitous and is present as part of many physical and psychological disorders that carry lifetime morbidity and are in some cases, fatal (Ladha, 2002). Social Anxiety is the unpleasant emotion people experience due to their concern with interpersonal evaluation (Leary and Kowalski, 1995a). It may be defined as a feeling of discomfort in social interactions (Pennington, Scheier & Buss, 1975; Scheier & Carver, 1985). It is concern about how one is appearing to others or how others are looking at them (Buss, 1980; Leary, 1980; Leary & Schelker, 1981). It is this form of anxiety that causes us to occasionally or frequently avoids social interaction. Socially anxious individuals are less likely to initiate interactions, talk less, disclose less about themselves, sometime stammer and even stutter on speaking and occasionally even withdraw from the anxiety producing situation altogether (Daly et al, 1997; McCroskey, 1997). This tendency to withdraw from social situations is not a feature of anxiety per se, as proven by Schachter (1959), who discovered that when we are anxious due to non-social factors, we tend to affiliate more with other people, not less. Therefore, avoiding affiliation generally occurs when the source of anxiety involves other people, either real or imagined (Franzoi, 2000). Henceforth, social anxiety, also called social phobia, is a disorder characterized by over whelming anxiety and excessive self-consciousness in everyday social situations. People with social anxiety have a persistent, intense and chronic fear of being watched and judged by others, and of being embarrassed and

humiliated by their own actions. People with social anxiety often recognize their fear of being around people as being excessive or unreasonable, but they are unable to overcome it (NIMH, 1999). There is a pervasive fear of social situations in which there is a perceived probability of experiencing scrutiny or rejection. Individuals with social anxiety experience higher negative affect, loneliness and suicidal ideation, less satisfaction with their relationships and less educational and career attainment than non-socially anxious individuals with similar capabilities (Kashdan, 2002).

Correlational researches have shown that socially anxious people lack assertiveness (Lawrence, 1970) and have problems behaving assertively in various domains (Arrindel et al, 1990). Although they know how to be assertive, they behave more submissively as compared to their more confident counterparts (Alden & Cappe, 1981). Their submissive self presentation behaviour is not due to a social skill deficit, but rather to them it is an easier way of avoiding social disapproval. In 1981 Arkin devised the term "protective self-presentation" , according to which, the need to avoid social disapproval motivates an individual to engage in, rather than avoid social interaction altogether, by adopting a submissive self-presentation style (Trower & Gilbert, 1989). Socially anxious people are reported to be more jealous as individuals (Bringle et al, 1979), and they also perceive themselves as more lonely compared to their non-anxious counterparts (Russel et al, 1980). Hence a vulnerability to loss of status and social rejection along with an involuntary activation of submissive strategies are all part of a socially anxious individual's behaviour schema (Trower, et al 1988) .

Research to define causes for social anxiety is ongoing. Animal studies are adding to the evidence that suggests that, social anxiety can be inherited. Recently, research supported by the NIMH (1999) has identified the site of a gene in mice that affects learned fearfulness. The importance of the environmental effect on the development of social anxiety cannot be over looked. People with this disorder may acquire their fear from observing the behaviour and consequences of others, a process called observational learning or social modelling (NIMH, 1999). Parents' characteristics and behaviour have also been implicated in the development of social anxiety symptoms in children. Bruch et al (1989), as well as Buss (1980) emphasise the role of parents who are overly concerned with the opinions of others in the development of social anxiousness in children. Bogels et al (2001) discuss that social anxiety in mothers significantly predict social anxiety in children and also identified parental rejection, emotional warmth and family sociability as influencers in development of the same.

Research around the world has shown that social anxiety as a disorder is among the most common of mental health problems (Furmark, 2002). Even though the number of sufferers appears to be on the increase, in at least some sections of society (Heimberg et al., 2000), the condition is still neither widely known among the general public, nor is it given its due importance by the physician community. The Social Anxiety Institute International and the Social Anxiety Network have declared social anxiety to be the third

largest mental health care problem in the world. It is also considered to be the largest and the least understood of all the anxiety disorders, with a mammoth 8% of the general population suffering from it in some form or another. It occurs more in women than in men, although a larger number of men seek help for social anxiety (NIMH, 1999).

The most important attitude that any of us form is the attitude about self, an evaluation that is known as self-esteem (James, 1890), which may also be referred to as self-evaluation (Oxford, 2001). An individual's self-esteem maybe positive (favourable or high), neutral or negative (unfavourable or low). High self-esteem and positive self-evaluation are both viewed as predictors of high confidence level in an individual. Confidence or rather self-confidence has been defined as belief or faith in one self, assuredness or a sense of self-reliance. It is often referred to as being the single best predictor for success (Baron & Byrne, 2000). People who have higher level of self-confidence have also been shown as having higher level of social confidence compared to their less confident counterparts, who are found to be socially anxious. Socially confident people are opposite to socially anxious people. As such, social confidence, by definition, is a feeling of comfort in the midst of people. A socially confident person is one who enjoys social gatherings and is carefree of others' impressions of him (Khalique et al, 2003).

In the words of Sean O'Casey, (1880-1964), an Irish playwright, "The world's a stage and most of us desperately unrehearsed." Despite our tendency to rehearse prior to important social interactions, we often prove to be incompetent in our self-presentations. In such instances, when we are unable to project an appropriate public image, we feel embarrassed (Pramoti, 2000). Embarrassment is a sense or state of awkwardness or feeling ashamed that causes mental discomfort or anxiety. In other words, or rather in societal terms, it is an unpleasant emotion experienced when we believe that we cannot perform coherently in a social situation (Pramoti, 2000). It is perhaps the most social of all emotions and always occurs in response to social situations, whether they are real or imagined. It stems, as much from social roles and appearances as it does from one's private sense of self. Despite its reputation as a minor unpleasantness, people's actions suggest that they consider embarrassment quite aversive and they often go to extremes to try and avoid it, and when it occurs, they struggle to eliminate it (Maraniad & Hewestone, 1995).

Berne & Levy (1988) found that embarrassment was associated with reduced heart rate, which may be the product of inhibited sympathetic and increased parasympathetic activity. Another case study found possible discharges in the medial aspect of the right frontal lobe to be associated with pronounced feelings of embarrassment (Devinsky, 1982). More interestingly, initial gaze activity and head movements during embarrassment are to the left (Keltner, 1995), also suggestive of right – hemispheric activity.

Theories of embarrassment are basically classified into three groups. The first group focuses on one of the most common themes in embarrassment, i.e. looking bad in the eyes of others (decreased other's esteem). According to this theory, embarrassment occurs when one is concerned that one has made an undesirable impression on others, or when there exists a discrepancy between one's self image and a more negative image projected to others (Edelman, 1987). Such theories often depict the subjective experience of embarrassment as social anxiety. As mentioned earlier, the self-presentation theory of social anxiety (Leary & Kowalski 1995a, 1995b; Schlenker & Leary, 1982) proposes that people experience social anxiety when they are motivated to make a desired impression on other people but doubt that they will successfully do so. This theory not only lends support to the 'decreased other's esteem' theory of embarrassment, but also relates the two, demonstrating shared causal factors.

The second category is that of decreased self esteem theories, which claims that the emotional feelings of embarrassment originate in a loss one's self esteem and not in the loss of other's esteem. In one theory of this type it has been claimed that embarrassment begins with a decrease in other's esteem, but the emotional intensity of embarrassment is caused by a subsequent decrease in one's own self esteem (Modiglani, 1971). Other theories of this type conceive of embarrassment as a mild form of shame, or as a reaction to a violation of one's personal standards. For such individuals any social or group situation is extremely terrifying. As the size of the social group increases, so does the potential for humiliation. In the minds of socially anxious individuals, feelings and fear of humiliation and shame also include self-critical humiliation. It is not only the rejection and scrutiny of others that the individuals fear, but also the individual is onslaught of self-critical questioning, during and following a social interaction. Thus, individuals with social anxiety may not only fear direct humiliation from others in a group situation, but also their own self-criticism (Neelley, 1998), as a reaction to a violation of their own standards.

The third category of theories on embarrassment claims that embarrassment arises from the disruption of the assumptions necessary for social interaction. Drawing on Goffman's (1959) analysis of social interaction as self-presentation, embarrassment is said to result when there is a disruption in the working consensus of identities in a social interaction. Although such disruptions may result form appearing worse than desired, they do not necessarily need to. Embarrassment can result from being publicly praised as well as by being in a given situation with some one who commits a faux pas. Such theories explain the subjective experiences of embarrassment that stem from lacking a coherent and acceptable way to behave in a given social situation.

Many aspects of social interaction appear to be motivated to reduce the possibility of embarrassment (Goffman, 1959). For this reason, it may be said that the actual episodes of acute embarrassment are fairly infrequent, but the fear of embarrassment is pervasively ubiquitous. As mentioned earlier individuals suffering from

social anxiety have an intrinsic fear of embarrassment. They live in a state of anxiety and fear of being judged and evaluated negatively by other people leading to feelings of inadequacy, embarrassment, humiliation and depression (The Social Anxiety Institute International and the Social Anxiety Network, 2004).

In view of the research quoted and the facts discussed in this section, this research was conducted so as to determine the relationship between social anxiety, social confidence and embarrassment. The researchers hypothesized a positive or a direct correlation between social anxiety and embarrassment, and negative or inverse correlations between both social anxiety and social confidence, and embarrassment and social confidence, and also to observe these relationships in the male and female samples separately.

METHOD

Sample

The incidental sample of 152 participants consisted of 76 male and 76 female students of Karachi University, between the age range of 18 – 25 years.

Materials

- A demographic sheet to record the gender, age, academic qualification, Residential area information and Socio-economic information of the participants.
- Social Anxiety and Social Confidence scale (Khalique et al, 2005)
- Susceptibility to embarrassment scale (Kelly and Jones, 1997).

Procedure

Each of the 152 participants were given the demographic sheet and both the scales to fill out, after which the data was tabulated for Social Anxiety, Social Confidence and Embarrassment, for males and females separately so as to account for and calculate gender differences.

RESULTS

Table I

Combined results for all participants with the Pearson's (r) values for Social Anxiety and Embarrassment, Social Confidence and Embarrassment, and Social Anxiety and Social Confidence

Combined Data N=152

Variables	Social Anxiety	Social Confidence	Embarrassment
Social Anxiety	-	r = -0.394 p < 0.001	r = 0.441 p <0.001
Social Confidence	-	-	r = -0.319 p <0.001
Embarrassment	-	-	-

df = N - 2 = 150

Table II

Results for the male sub-group with the Pearson's (r) values for Social Anxiety and Embarrassment, Social Confidence and Embarrassment, and Social Anxiety and Social Confidence

Males: N = 76

Variables	Social Anxiety	Social Confidence	Embarrassment
Social Anxiety	-	r = -0.332 p < 0.01	r = 0.466 p < 0.001
Social Confidence	-	-	r = -0.263 p < 0.05
Embarrassment	-	-	-

df=N-2=74

Table III

Results for the female sub-group with the Pearson's (r) values for Social Anxiety and Embarrassment, Social Confidence and Embarrassment,and Social Anxiety and Social Confidence

Females: N = 76

Variables	Social Anxiety	Social Confidence	Embarrassment
Social Anxiety	-	r = - 0.427 p < 0.001	r = 0.417 p <0.001
Social Confidence	-	-	r = -0330 p <0.01
Embarrassment	-	-	-

df=N -2 = 74

DISCUSSION

The results obtained for the combined data clearly show a very strong and statistically significant positive correlation between social anxiety and embarrassment and similarly significant strong negative correlations between social confidence, and embarrassment and social anxiety and social confidence respectively , $p < 0.001$(table I), consistent with our hypotheses.

These results can be supported by many researches conducted in the field of social anxiety. It has been reported that people who are socially anxious are acutely self-aware (Patterson and Ritts, 1997), thinking about how others are perceiving them and about their ability (or often, inability) to cope with the situation, often to the point of being unable to devote their full attention to other things (Hartman, 1983; Sarason & Sarason, 1986; Hope, Gansler & Heimberg, 1989). As troubling as it may be, self-preoccupation is an essential feature of social anxiety. It can be added here that in this state of self-preoccupation and acute self-awareness, socially anxious individuals are further handicapped in dealing with social interactions. Due to their extreme self-consciousness, which on one hand will undoubtedly further diminish the individuals' ability to behave coherently, and on the other hand will fluster and agitate them even more, the already socially anxious individuals will feel even more anxious. This

increased social awkwardness, hampers performance in social situations even further, thus developing a vicious cycle, where anxiety in social situations, along with acute self-consciousness and self-evaluation, lead to more of the same. The positive relationship between social anxiety and embarrassment is also supported by the fact that some people, especially those who are shy or easily embarrassed, tend to feel anxious in any situation in which they might be evaluated. For these people anxiety may be more of a trait rather than a temporary situation (Meyers, 1988). Also, socially anxious people are reported to become fearful, overly self-conscious, and may have thinking difficulty (Beck, et al, 1985; Buss, 1986), which may lead to embarrassing social situations. Some theories of embarrassment have also depicted the subjective experience of embarrassment as social anxiety (Maastead & Hewstone, 1995). It has been noted that embarrassment seems to repeatedly tie in with social anxiety. As mentioned earlier, embarrassment is an uncomfortable emotional state that occurs in awkward social situations. The subjective emotional experience of embarrassment is characterized by several reactions (Parrat & Smith, 1991), its hallmark being a feeling of social awkwardness, often accompanied by flustering, surprise or feelings of foolishness. The embarrassed person typically feels self-conscious and the focus of attention, and there is a strong motivation to mend or escape the situation. Behavioural symptoms of embarrassment include blushing, autonomic arousal, symptoms of nervousness, reduced eye contact, etc. all symptoms of social anxiety as well (NIMH, 1999).

Socially anxious individuals get embarrassed and ashamed of being unable to behave adequately or appropriately in social situations. The fact, that socially anxious individuals are highly shame-sensitive (Harder, 1995), makes such individuals prone to being embarrassed in social situations and have less confidence in themselves in most other situations as well. They are also found to be low self- monitors (Buss, 1986), attribute their failures to themselves (Arkin et al, 1989) and experience an acute awareness of potentially inferior status as compared to others (Trower et al 1998). Such individuals therefore, have lower self-esteem and self-image as well as an inferiority complex. Evidence indicates that the self-reported tendency to experience embarrassment correlates with the sense of personal inferiority (Gilbert et al., 1994). A lowered self image is usually due to discrepancies between one's real and ideal selves, which result in a person being vulnerable to feelings of shame and embarrassment (Diener, 1979).

The positive correlation between social anxiety and embarrassment was found to be highly significant at $p < 0.001$, in both the combined (Table I) as well as in the male and female sub-groups (Table II & III). As embarrassability is more of an internal attribute, individual differences rather than gender differences will come into play, as also demonstrated by individual difference studies like Miller (1995), which show that the heightened concern for others' evaluation, which is a hallmark of social anxiety, relates to an increased experience and display of embarrassment.

Results show negative relationships between social anxiety and social confidence, as well as embarrassment and social confidence. As mentioned earlier, high self-esteem and positive self-evaluation are both viewed as predictors of high confidence levels in an individual. Confidence in one's own self is often the single best predictor for success (Baron & Byrne, 2000). People, who have higher levels of self-confidence, also have higher levels of social confidence compared to their less confident counterparts, who are found to be socially anxious. Research consistently indicates that high self-esteem has beneficial consequences, while low self-esteem has the opposite effect (Leary, Schreindorfer and Haupt, 1995). Psychologists, experts in human resource management and sociologists have also long emphasized the central role played by self-esteem, self-confidence and self-perception in personal motivation and social interactions (Benabou and Tirole, 1999). For instance, negative self-evaluation is associated with less adequate social skills (Olmstead et al, 1991), such that if an individual has a low level of confidence in his or her own self, she/he is more likely to have problems interacting efficiently in social situations. It has also been found that higher the social anxiety, lower the self image, and thus lower the social confidence (Davidoff, 1987), as indicated by the results in the present study as well.

Research has proven that people suffering from social anxiety not only have lower level of confidence in themselves, but they also believe that other people are more confident and competent than they really are (Bruce and Saeed, 1999). Such a belief system again indicates that these people suffer from an inferiority complex, and have low perceived behavioural control, which can in turn lead to feelings of depression, helplessness and hopelessness and in extreme cases may also lead to suicidal ideation. Such people have low self-esteem and self-confidence and lack assertiveness, in that they are unable to get their point across, and to get their rights even though they may be aware of them, and also lack self-efficacy, which is a major component of high self-esteem (Greenwald & Becker, 1985). This leads to learned helplessness, further lowering of self-image and confidence in social situations and even more anxiety due to fear of social rejection and embarrassment. This point has also been demonstrated by Pomerlau & Rodin (1986), who demonstrated that socially anxious individuals acquire learned helplessness, and their attitude can make unpleasant events profoundly stressful. Socially anxious individuals invest a good portion of their attention, energy, and time on persistent fears about impression management, hyper-vigilance to social threat cues, social avoidance/withdrawal behaviours, and post event rumination (Clark & Wells, 1995; Rapee & Heimberg, 1997). Given that they devote personal resources to self-regulating negative outcomes, socially anxious individuals are more likely to experience a disruption in the experience of positive outcomes, further diminishment of self and social confidence, as demonstrated by the present research results.

The present study also analysed the data for male and female participants separately. It was seen that although directionally similar relationships existed between the three variables, respectively, in the combined as well as the gender specific analysis,

the negative relationships between social confidence and embarrassment in both the male and the female sub-groups were not as high as those found for the combined analysis ($p < 0.001$). In the female sub-group, this negative correlation between social confidence and embarrassment, though lesser than that of the combined data analysis, was found to be significant at $p < 0.01$ (table III) and higher than that of males which is significant at $p < 0.05$ (table II). Similarly, the inverse correlation between social anxiety and social confidence in the female sub-group was found significant at $p < 0.001$(table III) and higher than in the male sub-group, which is significant at $p < 0.01$ (table II).

The reason for these differences can be attributed to various social and cultural factors. In our society there is a huge difference between the way boys and girls are treated and raised. There are starkly defined gender roles, which are the expectations defined by society that indicate what is appropriate behaviour for men and women. The expectations for males and females are so different that they often lead to bias and stereotyping. Such stereotypes produce sexism, negative attitudes, and expectations and behaviours toward people based on their gender (Bem, 1984; 1993).

In this male dominant world, males are given more independence, more opportunities and rights to make their own decisions, and there is more tolerance and acceptance for males to make bolder and more confident behaviour choices. On the other hand, females are brought up as the more oppressed and suppressed gender as compared to males who are allowed a lot more freedom at an earlier age. For these reasons males are more competitive and interactive than females, and tend to be more confident of themselves. Not only is their bold behaviour accepted and tolerated, it is also encouraged. Where as in females, bold choices are not only discouraged but also looked down upon in many strata of our society. In a study conducted by Broverman et al. (1972), traits related to warmth, emotion, feeling and expression were judged as more appropriate for women, and competency traits as more appropriate for men. In certain sections of our society, it is also considered taboo for females to show confidence and good social skills and a quiet, shy demeanour is not only encouraged but also inculcated in their personalities from an early age.

Also, women as a gender are considered to be more insecure and less assertive than men, so they usually lack confidence and have low self-esteem. Many studies have found men to have higher self confidence than women (Engly & Mladinic, 1989, Williams & Best, 1990). De Jong (2002) demonstrated that socially anxious women displayed low levels of self-esteem on self-report measures. Women are seen as sentimental, submissive and superstitious, whereas men are viewed as adventurous, forceful and independent (Feldman, 1998). This may be because women as a gender are 'expected' to be dependent on their 'superior' male family members and significant others, whether they are fathers, brothers or husbands, for support, approval, permission, opinions and decision-making. For these reasons, there are more social constraints on women as compared to their male counterparts, and over time they become more anxious

and embarrassed in social situations. Research has also shown apprehension and fear of negative evaluation, the two major factors of social anxiety to be present in females more than males (Puklek et al., 2000). The tendency for individuals in submissive roles, like women in our society, to report, display and be judged as experiencing more intense embarrassment (Monarch, 1997), also attests to the relationship between embarrassment and reduced self-esteem, which in turn leads to high social anxiety and low social confidence. It is due to these reasons and factors and the obvious differences in upbringing and parenting styles, as well as the disparity in the social constraints for male and female children due to the stereotyped gender roles, that females show signs of higher levels of anxiousness and susceptibility to embarrassment in social situations as compared to males, due to which, the inverse correlations between social confidence and embarrassment, and social anxiety and social confidence respectively, were found to be higher in the female sub-group than that in the male sub-group.

CONCLUSION

The hypotheses that Social Anxiety is positively correlated with Embarrassment, and Social Confidence is negatively correlated with both Social Anxiety and Embarrassment were significantly proved, all at $p < 0.001$.

Analysis to determine these trends in both gender, correlations showed directionally similar relationships between the three variables with variations in statistical significance. In the female sub-group, the negative correlation between Social Confidence and Embarrassment was found to be significant at $p < 0.01$, while in males at $p < 0.05$. Similarly, the inverse correlation between Social Anxiety and Social Confidence in the female sub-group was found highly significant at $p < 0.001$, and significant in the male sub-group at $p < 0.01$. The positive correlation between Social Anxiety and Embarrassment was found to be highly significant at $p < 0.001$, in both the sub-groups.

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Annexure 1

Name (Optional): _____

Age: _____

Sex / Gender: _____

Academic qualification: _____

Residential area: _____

Socio-economic information:

Lower lower ( )	Lower middle ( )	Lower upper ( )
Middle lower ( )	Middle middle ( )	Middle upper ( )
Upper lower ( )	Upper middle ( )	Upper upper ( )

Annexure 2

INSTRUCTIONS: Given below is a list of twenty statements. Read them and indicate whether you always, often, sometimes, rarely or never feel and behave so. Mark a tick( ) to show the frequency of your feeling and behaviour.

DO NOT LEAVE ANY STATEMENT UNTICKED.

	STATEMENTS	Always	Often	Some-times	Rarely	Never
1	I confidently talk to people at parties.					
2	I argue my point of view even with those who hold a different view.					
3	I am sensitive to other's impressions of me					
4	I enjoy when I have become the focus of attention of all others.					
5	I become upset when I feel guests are looking at me.					
6	I initiate people to talk and laugh in social evenings.					
7	I avoid to attend social gatherings.					
8	I get nervous while talking to people.					
9	I find myself lively in social functions					
10	I prefer to sit in a corner while others interact with each other.					
11	I feel uneasy in social evenings.					
12	I feel myself looking lost and lonely at parties.					
13	I feel relaxed in social interactions.					
14	I avoid to continue conversation with people not known to me.					
15	I feel comfortable when I interact with people.					
16	I find difficult to mix with people.					
17	I do not bother about other's impressions of me.					
18	I feel comfortable in social gatherings.					
19	I am afraid of being evaluated by others.					
20	I do not care of being evaluated by others.					

Annexure 3

INSTRUCTIONS: Listed below are a variety of statements. Please read each statement carefully and indicate to the left of each item the extent to which you feel it applies to you using the following scale.

1	2	3	4	5	6	7
Not at all like me						Very much like me

1. I feel unsure of myself. (1 2 3 4 5 6 7)
2. I don't feel comfortable in public unless my clothing, hair etc. are just right. (1 2 3 4 5 6 7)
3. I feel uncomfortable in a group of people. (1 2 3 4 5 6 7)
4. I don't mind being the centre of attention. (1 2 3 4 5 6 7)
5. I probably care too much about how I come across to others. (1 2 3 4 5 6 7)
6. I feel inadequate when I am talking to someone I just met. (1 2 3 4 5 6 7)
7. I feel clumsy in social situations. (1 2 3 4 5 6 7)
8. I feel uncomfortable leaving the house. (1 2 3 4 5 6 7)
9. Sometimes I just feel exposed. (1 2 3 4 5 6 7)
10. I feel humiliated if I make a mistake in front of a group. (1 2 3 4 5 6 7)
11. I get flustered when speaking in front of a group. (1 2 3 4 5 6 7)
12. I often get emotionally exposed in public and with groups of people. (1 2 3 4 5 6 7)
13. It is unsettling to be the centre of attention. (1 2 3 4 5 6 7)
14. I get tense just thinking about making a presentation by myself. (1 2 3 4 5 6 7)
15. I have felt mortified or humiliated over minor embarrassment. (1 2 3 4 5 6 7)
16. I am very much afraid of making mistakes in public. (1 2 3 4 5 6 7)
17. I don't like being in crowds. (1 2 3 4 5 6 7)
18. I do not blush easily. (1 2 3 4 5 6 7)
19. I often worry about looking stupid. (1 2 3 4 5 6 7)
20. I feel so vulnerable. (1 2 3 4 5 6 7)
21. I am concerned about what others think of me. (1 2 3 4 5 6 7)
22. I am afraid that things I say will sound stupid. (1 2 3 4 5 6 7)
23. I worry about making a fool out of myself. (1 2 3 4 5 6 7)
24. What other people think of me is very important. (1 2 3 4 5 6 7)
25. I am not easily embarrassed. (1 2 3 4 5 6 7)

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RELIGIOUS ORIENTATION AND SCHIZOTYPAL PERSONALITY TRAITS: A CORRELATIONAL STUDY

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ABSTRACT

The present study examined the relationship between religious orientation & schizotypal personality traits. To investigate the relation between the two variables it was hypothesized that an intrinsic orientation towards religion would be negatively related to schizotypal personality traits & an extrinsic orientation towards religion would be positively related to schizotypal personality traits. To assess the relation between two variables sample included 53 students (23 males & 30 females) from University of Karachi. The age range of the sample was between 20 – 30 years ($\bar{X}$ = 22.84 years) with a minimum qualification of graduation. The Age-Universal Religious Orientation Scale (Gorsuch & Venable, 1983) & Schizotypal Personality Questionnaire, SPQ (Raine, 1991) were administered to assess the religious orientation and presence of Schizotypal Personality traits. The data was analyzed by using the Pearson product moment coefficient correlation. The results indicate insignificant relationship between intrinsic religious orientation and schizotypal personality traits ($r = 0.192$, $p>0.05$) & extrinsic religious orientation and schizotypal personality traits ($r = 0.142$, $p>0.05$).

INTRODUCTION

Religiosity is a complex, multidimensional construct with substantial associations with lifetime psychopathology. Some dimensions of religiosity are related to reduced risk specifically for internalizing disorders, and others to reduced risk specifically for externalizing disorders. Within the psychology of health, an important contribution made by researchers in psychology of religion is the significant relationship between religiosity and psychological well-being. Many authors debate the issue of

whether religion has beneficial or detrimental effects on the mental well being of individuals (Bergin, 1980a, *b*; Crawford, Handel & Weiner, 1989; Ellis, 1980; Sharkey & Maloney, 1986). Eysenck (1998) notes that research ' . . . has uncovered a reasonably consistent and potentially important finding that individuals who are high in religiosity are significantly more likely than those low in religiosity to be low in psychoticism'. Indeed, reviews of empirical research have not revealed consistent findings, with religious measures being only sometimes related to aspects of health and illness (Batson, Schoenrade & Ventis, 1993; Batson & Ventis, 1982; Beit-Hallahmi & Argyle, 1997; Bergin, 1983; Bergin, Masters & Richards, 1987; Crawford *et al*., 1989; Spilka, Hood & Gorsuch, 1985; Wulff, 1997).

Ellis (1980) has claimed that religiousness is accompanied by irrational thinking and emotional disturbance, whilst Bergin (1983) argues that there is no support for the view that religiosity is a counterpart of psychopathology. In all, this has led many commentators to agree that results are mixed (Batson & Ventis, 1982; Batson *et al*., 1993;Gorsuch, 1988; Spilka *et al*., 1985). One area of theoretical guidance is provided through the use of various religious orientations.

It is argued that there are three main religious orientations, an intrinsic orientation toward religion, an extrinsic orientation toward religion and Quest (Beit-Hallahmi & Argyle, 1997; Gorsuch, 1988;Wulff, 1997). Individuals described as having an intrinsic orientation to religion have been described as living their religious beliefs, the influence of religion is evident in every aspect of their life (Allport, 1966). On the other hand, those who demonstrate an extrinsic orientation to religion have been described as using religion to provide participation in a powerful in-group (Genia & Shaw, 1991); protection, consolation, and social status (Allport & Ross, 1967); religious participation (Fleck, 1981); an ego defense (Kahoe & Meadow, 1981).

Gorsuch (1988) argues that one area of research that has given an insight into the relationship between religion and mental health is the distinction between individuals who display intrinsic and extrinsic orientation towards religion (Allport, 1966; Allport & Ross, 1967). Gorsuch argues that this distinction between the two different orientations to religion has been the most useful to the research on the relationship between religiosity and psychological well-being.

The three constructs of psychological well being dominant in the literature on religious orientation and psychological well-being are trait anxiety, depression, and self-esteem (Batson & Ventis, 1982; Batson *et al*., 1993; Loewenthal, 1995). However, research is less consistent when religious orientation has been compared to measures of depression and self-esteem, showing an intrinsic orientation to religion to be associated with lower scores on depression measures (Genia, 1996; Genia &Shaw, 1991; Koenig, 1995; Nelson, 1989, 1990; Watson, Morris & Hood, 1989) and an extrinsic orientation

towards religion associated with higher scores on depression measures (Genia & Shaw, 1991; Park, Cohen & Herb, 1990; Watson *et al*., 1989).

Maltby, et al (2000), recently offered support for a theoretical link between schizotypy and religious orientation. Schizotypal Personality Disorder is a pervasive pattern of social and interpersonal deficits marked by acute discomfort with, and reduced capacity for, close relationships as well as by cognitive or perceptual distortions and eccentricities of behavior, beginning by early adulthood. Individuals with this disorder often seek isolation from others. They sometimes believe that they have extra sensory ability or that unrelated events relate to them in some important way. They generally engage in eccentric behavior and have difficulty concentrating for long periods of time. Their speech may include unusual or idiosyncratic phrasing and constriction. It is often loose, digressive or vague but without actual derailment or incoherence (DSM-IV-TR, 2000). The results suggested that the type of religious orientation (intrinsic or extrinsic) accounted for a portion of "unique variance in borderline personality, paranoid and suspiciousness aspects of the schizotypal personality" (Maltby, et al, 2000).

It has been suggested that religiosity might be considered within the concept of schizotypy. This is an important issue because if religiosity is an aspect of schizotypy, then religiosity might be a predisposing factor to schizophrenia. White, Joseph & Neil (1995) found that greater religiosity loaded negatively with borderline personality & loaded positively with schizotypal personality, as assessed using the STB (borderline personality scales) & the STA (schizotypal personality traits), respectively, which are the subscales of STQ, a schizotypal personality scale (Claridge & Broks, 1984). However, the strength of the association were weak & do not provide strong evidence that religiosity is an aspect of schizotypal traits.

Previously, Rust (1992) explored the frequency of schizotypal indicators found in members of occult sects. The sects used in the subject pool included one with primarily Christian beliefs and one with primarily Hindu beliefs, though confidentiality prevented identification of exactly which sects participated. Rust stated that "many of the positive symptoms associated with acute schizophrenia and schizotypal personality disorder... often express themselves in religious form". Utilizing the Rust Inventory of Schizotypal Cognitions, Rust found there to be significant differences between the mean scores of his occult groups and the general population control group, although the exact differences were dependent upon the particular group of membership and he felt fairly confident that religion itself was not a significant factor. The more pertinent factor appeared to be that the structure of beliefs of the groups with atypical results was "to some extent characteristic of the pre-morbid schizophrenic".

The link between schizotypal personality traits and involvement in new religious movements which may represent one way of 'inaugurating change in society,' was investigated in a study by Day & Peters (1999) using measures of schizotypal traits such

as the Oxford and Liverpool Inventory of Feelings and Experiences (Mason, Claridge & Jackson, 1995) and the Schizotypal Personality questionnaire (Claridge & Brooks, 1984). The results of the studies provided support for a three-factor structure of schizotypy. The main factors that were supported were "magical ideation," "unusual perceptual experiences," and "paranoid ideation and suspiciousness" (Hewitt & Claridge, 1989; Joseph & Peters, 1995).

Miller and Burns (1995) also found that males scored higher on negative symptoms using the Schizotypal Personality Questionnaire. However, they did not find females scoring higher than males on positive schizotypal features.

Langdon and Coltheart (1999) found higher cognitive-perceptual scores in females, and high interpersonal deficits in males. Roth and Baribeau (1997) found that males are significantly higher only on the Eccentric-Odd Behavior subscale of the SPQ, while females score higher on the Ideas of Reference, Odd Beliefs/Magical Thinking, and Social Anxiety subscales. Females also scored higher on the Cognitive-Perceptual and Interpersonal Deficits factors. Diduca & Joseph (1997) found that association between religious preoccupation & magical ideation was only found for men.

On the basis of presented literature, it was assumed that an intrinsic orientation towards religion would be negatively related to schizotypal personality traits and an extrinsic orientation toward religion would be positively related to schizotypal personality traits.

METHOD

Sample

The sample of the research comprised of 53 Muslim students of University of Karachi including 23 males & 30 females. Three departments were selected from arts and science faculty through prospectus, which were department of Statistics, department of Biochemistry and department of English. An application was given to the chairperson of the concerned department and their consent was taken. The subjects were then randomly chosen from attendance sheets of students. Before administration of the measures counterbalancing was also done. The age range of the sample was from 20-30 years with mean age of 22.84 years. The required educational level of the participants was at least graduation.

Instruments

Each respondent completed a short test booklet containing the three questionnaires: -

a) **Demographic Form:** contained information such as name (optional), age, gender, educational level, sect, marital status, family structure & socioeconomic status.

b) **Schizotypal Personality Questionnaire (SPQ):** SPQ (Raine, 1991) is a 74 items scale concerned with the different schizotypal personality traits. Each "YES" response score one point & "NO" response score as zero. Total score can therefore range from 0 to 74. In addition to the 9 sub-scale scores and the total scale scores, scores from the SPQ can be computed to assess these three factors by summating sub-scale scores as follows: **Cognitive-Perceptual:** Ideas of Reference, Odd Beliefs / Magical Thinking, Unusual Perceptual Experiences, Paranoid Ideation. **Interpersonal:** Social Anxiety, No Close Friends, Constricted Affect. **Disorganized:** Odd Behavior, Odd Speech.

c) **The Age-Universal I-E Scale (Gorsuch & Venable, 1983):** This scale is a derived, revised, and amended measure of the Religious Orientation Scale (Allport & Ross, 1967), which taps two types of religious orientation i.e. Intrinsic religious orientation and Extrinsic religious orientation. Scale consists of 20 items. Responses were scored on a 3-point scale from (3) "yes", (2) "not certain", and (1) "no".

Procedure

The subjects were approached through administration of their department. Among the three questionnaires, the respondents were required to fill a demographic form and then a schizotypal personality questionnaire was administered to measure the aspects of schizotypal personality. Age-Universal I-E scale was also administered to tap the religious orientation of the subjects. The order of presentation of the questionnaires was counterbalanced that is half of the male sample received schizotypal personality questionnaire first and then religious orientation scale and for the half of the male sample the reverse order was followed. The same procedure was applied with the female sample of the research to counteract any possible order effect.

Statistics

The data was pooled and analyzed by applying Pearson product-moment coefficient correlation. Statistical package for social sciences (SPSS Version 11.0) was used.

RESULTS

Table 1

Table showing the demographic characteristics of sample

N= 53

Demographics		Frequency	Percentages
Gender	Female Males	30 23	56.6 43.4
Socio Economic Status	Upper middle class Middle class Lower class	21 28 4	39.6 52.8 7.5
Marital status	Married Single	4 49	7.5 92.5
Education	Graduation Masters	26 27	49.0 50.9

Table II

Table showing correlation between Extrinsic/ Intrinsic Religious Orientation and Schizotypal Personality Traits

N= 53

Variables	r	Significance Level
Extrinsic Orientation & Schizotypal Personality Traits	.142	P > 0.05
Intrinsic Orientation & Schizotypal Personality Traits	.192	P > 0.05

Table III

Table showing gender difference on the variable of Schizotypal Personality Traits

N = 53

Sub scale	Gender	N	Mean	S.D	Std.error of mean	t	Sig
Ideas of reference	Male	23	4.34	2.6	.55	-.282	.779
	Female	30	4.53	2.11	.385		
Suspiciousness	Male	23	3.65	2.33	.528	-.143	.356
	Female	30	4.20	1.86	.34		
No close friends	Male	23	4.28	2.0	.538	0.907	.036
	Female	30	3.40	2.2	.34		

P > 0.05

DISCUSSION

The present study was designed to examine the relationship between religious orientation and schizotypal personality traits. It was assumed that an intrinsic orientation towards religion would share negative relation with schizotypal personality traits. However results indicated insignificant relationship between intrinsic orientation and schizotypal personality traits ($r = .192$, $p > .05$). The second hypothesis of the research that extrinsic religious orientation will be positively related with schizotypal personality traits was also not verified ($r = .142$, $p > 0.05$). When partial correlation was applied to control the effect of marital status, gender, age, socioeconomic status and sect, the relationship of extrinsic and intrinsic religious orientation with Schizotypal personality traits remained insignificant.

This might be due to the fact that religious coping styles of the individuals were not taken into consideration. Pargament (1990, 1997) suggests that a religious coping model might better explain the relationship between religiosity and psychological well-being. He argues that such a theoretical model would address the complex and continuous process by which religion interlocks with an individual's life and allows them to deal with stresses in life. Furthermore Pargament views religious coping as a mediating factor in the relationship between religious orientation and psychological well-being. Intrinsic religious orientation and positive religious coping are thought to reflect a positive committed, long term and adaptive involvement in religiosity through which religion helps and equips the individual to make sense of the world and enables the person to respond positively in the appraisal and coping of stressful events over long periods of time. Therefore, it is these adaptive approaches to religiosity, which lead to long-term happiness. So, it is suggested that type of religious coping should be catered for more accurate findings.

At present, findings regarding the relationship between religiosity and schizotypal traits suggest that the relationship between religiosity and schizotypal traits is sensitive to how religiosity is measured. Contradictory research findings are common within many areas in psychology of religion and especially within the relationship between religiosity and other aspects of psychological well being (Gorsuch, 1988; Batson, Schoenrade & Ventis, 1993).

Secondly the insignificant relationship between religious orientation and schizotypal traits in this research was probably because of the small sample size which was consist of only university students. This is further supported by the fact that individual who have less commitment and conviction to religion such as student sample does not show any association between religiosity and dissociation (Schumaker, 1995; Dorahy, 1999). Further the items of religious orientation scale have issues of face validity that probably had an effect on the results of the study and participants may have given

fake responses due to social desirability. Our finding may also not be generalized because sample did not belong to different sects of religion and ethnic groups.

Table III shows gender differences on variable of Schizotypal personality traits, however, these results appeared insignificant but an important fact revealed by the results is that females scored high on suspiciousness as compared to males ($t = -.14$, $p > 0.05$) which is consistent with the findings of Raine (1992b), that females score higher on positive symptom sub-scales (Ideas of Reference and Odd Beliefs / Magical Thinking) and the factor of Cognitive / Perceptual Dysfunction. However males scored higher on negative symptom sub-scales (No Close Friends).

A distinction must be made between religiosity and religious experiences. Religious experience has been shown to be associated with schizotypy/schizophrenia (Jackson, 1992). It would have been useful if we had also inquired about religious experiences as these may lead to religious preoccupation. Furthermore self report measures of Schizotypal thinking often include, either implicitly or explicitly, items relating to religious beliefs. It might be argued that there exists an assumption within much of the research community that religiosity is an aspect of Schizotypal thinking. However, until this association has been convincingly demonstrated, religiosity and schizotypy should not be confounded (Didaca & Joseph, 1997).

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