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# PSYCHOSOCIAL CAUSES OF DOMESTIC VIOLENCE AMONGST PAKISTANI FEMALES

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## ABSTRACT

The present research was conducted to find out the psychosocial causes of domestic violence amongst the Pakistani females. The purposive sample consisted of 30 married females exposed to domestic violence. Personal History Questionnaire, Interview Schedule and 15-Item scale for Exposure to Domestic Violence were individually administered to each subject who voluntarily consented to participate in this research. The results indicate that all the subjects were exposed to verbal threats of violence, abusive language, a slight slap, pushing, shoving, kicking, punching, biting, choking, throwing things around, injury with a household objects and forced sex. However; burning, injury with weapon, throwing acid on face or body were not reported by anyone of the respondents probably, because the sample was relatively smaller in size. Furthermore. Chi square with Yate's correction did not indicate any significant relationship between different types of violence and drug addiction, family system (nuclear vs joint), childlessness of wife and financial status of each family.

## INTRODUCTION

The present research investigated the psychosocial causes of domestic violence amongst Pakistani females with low economic status. Unfortunately, ours is a violent age and the violent behaviour has become like an epidemic throughout the world, whether it is visible within the family or outside the family. Though domestic violence existed in the past as well; it was not considered a problem till the early seventies. In fact, large scale surveys during the 1970's established the wide spread extent of physical aggression within marriage (Schulman, 1979 & Straus, Gelles & Steinmetz, 1980). Later on, numerous studies of psychological effects of domestic violence on women documented depression (Campbell 1989); anxiety (Russell, Lipov, Phillips & White, 1989); suicide attempts (Gelles & Harrop, 1989); social withdrawal and somatic complaints (Russel et al, 1989) as well as Post-traumatic specific symptoms (Astin, Ogland-Hand, Coleman & Foy (1995)

Of course, parents serve as "Role Models" for their children in terms of problem solving, coping and communication of strong feelings. As a result, marital conflict and distress or domestic violence may interfere with effective role modeling in these areas as well as with consistent parental limits, guidelines and serious consequences for child behavior. There is sufficient empirical data that suggest that psychological aggression and control tactics by male spouses can cause an adverse effect on women's self-esteem and general well being that is often as strong as that of physical aggression.

Unfortunately, domestic violence is as extensive phenomenon which is not easy to define, probably, because much of the hitting in our families is culturally approved and normatively accepted as marriage license is a "hitting license" (O'Leary, Malone & Tyrea, 1994). Gelles and Straus (1979) defined violence as "an act carried out with the intention of physically hurting another person." (Gelles & Straus 1979). P549). Jain (1992) and Lang and Lang (1973) asserted that all violence involves physical force. Aggression of a purely verbal nature, symbolic acts of degradation, and all outer attacks in which there is no use of physical force are thereby excluded from consideration. "Most violent acts result in physical injury or in destruction of objects valued by those against whom the acts are directed." (Jain, 1992, p.6). Thus, in the present research, "domestic violence" implies both physical violence and psychological violence, such as, slapping, kicking, destroying a loved object, burning, unwanted or repulsive sexual practices, stealing spouses' money lying about assets or threatening with a knife, gun or sharp house-hold object.

Interestingly enough, family is the only place that allows the unmasked behavior of family members toward each other. Consequently , the uninhibited behaviour will be tolerated by family members and at times, when this reaches a peak, domestic violence is the result. Sometimes, the spirit of mutual respect and understanding that is expected to be part of family ethics may turn sour over time because the desire and willingness to give and take may diminish. The result is that one or more members feel a growing sense of anger and frustration which reaches a peak at some point in their family life. Thus, domestic violence becomes the fundamental part of family life. Jain (1992) quotes Goode, Bach, Wyden & Sprey who suggest that "focus on conflict and violence may, infact, be a more revealing way of family dynamics than focus on family consensus and solidarity (Jain, 1992, p.8).

The value that our society attaches to marriage makes a woman's relationship to the parental figures and particularly to the husband doubly precarious. Traditionally, a woman 's position in the parental home is considered transitory for it is only a preparation for entering the husband's family. In cases of joint family system, young women are expected to adjust and conform to the wishes of their husbands and in-laws and to please elders. Any divergence, real or imaginary, from these roles can bring suffering onto the women, ranging from verbal abuse, mental torture, deprivation of food and money, denial of permission to meet friends and relatives to beating and physical torture.

Ironically enough, we often think that violence occurs either on streets or behind the bars; whereas it can also occur within the four walls of a safe place we call "HOME". Traditionally, three facets of any family transaction are: (1) parent-child interaction (2) spouse-spouse interaction and (3) child-child interaction. There is sufficient clinical evidence that suggests that if family conflicts, triangulations, enmeshment and/or family schism are not handled cautiously, they may set the stage for violent outbursts of primitive impulses, both sexual and aggressive in nature. Gradually, the home turns into a battlefield where psychic casualties and life-threatening injuries may take place in the heat of aggressive outbursts and escalating power struggle.

Browne & Brown (1991) report that "during the first half of the 1980's the death of nearly 17,000 people resulted from one partner killing another, with women twice as likely to be victims of such fatal partner violence as men". (Brown & Brown, 1991,pp.1-2).

Unfortunately, the situation in Pakistan appears more grim, probably because of low education and poor economic status of the majority. Furthermore, the Pakistani Family Ordinance provides little protection to women against polygamy, unilateral divorce, assault, rape and child custody battles. Farooqi's (1992) clinical data suggests that in this highly oppressive, religious and male dominant society, people seem to rely more on "violence" or "force" to solve or escape problems, particularly, matrimonial in nature. The Pakistani women like some other third world women (such as, Indians, Bengalis, Malaysians etc.) continue to be the most under privileged, under educated and the most traumatized group. Farooqi's (1992) research findings further indicate that women exposed to domestic violence manifest depression, loss of self-confidence, low self esteem, headaches and unsettled state of mind. Often fear, ignorance, religious and socio cultural beliefs prevent these women from exposing themselves as victims of home violence. Moreover, the battered women, throughout the world, usually do not keep in touch with their friends and family out of overwhelming fear, shame and embarrassment. As a result, they keep on bearing all kinds of domestic violence and psychological degradation just to maintain the façade of home peace. Consequently the under reporting of domestic violence fails to give us a true picture of the grave situation at home. (Cascardi, O'Leary, Lawrence & Schlee, 1995).

Malamuth, Sockloskie, Koss and Tanake (1991) argue that societies that regard qualities, such as, power, dominance, aggressiveness and competitiveness as "masculine", often breed individuals hostile to women. Consequently, in discordant marriages, men would certainly make women more fearful and cause more psychic as well as physical damage than vice versa. In fact, domestic violence is fairly common but a silent phenomenon which is found in all socioeconomic classes and all around the world. Astin, Ogland-Hand, Coleman and Foy (1995) report that individuals who have experienced violent and abusive childhood are more likely to grow up and become spouse-abusers than individuals who have experienced little or no violence in their childhood. Steinmetz (1978) and Straus, Gelles and Steinmetz (1980) found that even less severe forms of violence are passed on from generation to generation. Olson & Miller (1983) argue that violence begets violence and data suggests that the greater the frequency of violence, the greater the chance that the victim will grow up to be a violent partner or parent. Gayford (1975); Roy (1977) and O'Leary (1988) suggest that experiencing child abuse or witnessing parental spouse-abuse in the family or origin predisposes the husband to follow the role model he learned in childhood. They further add that domestic violence/abuse was more prevalent among those with low economic status. Nevertheless, this does not mean that domestic violence is confined to lower economic class. In fact, spousal violence can be found in all families across all cultures and socio-economic groups.

Farooqi (1992); Olson and Miller (1983); and Lang & Lang (1973) reported a strong association between various forms of family violence and specific stressful situations, such as, unemployment, poverty, financial crisis etc. Low education, low occupational status and low income usually lead to family violence, probably, because such families have fewer resources to cope with life stresses than do the families with higher position on the social ladder (Gayford, 1975 and Walker, 1989). Furthermore, it has been observed that the husbands who fail to fulfill their primary social roles as "providers" or "bread-winner" are more likely to drink and gamble. (O'Farrell & Murphy, 1995). Consequently, the increasing pressure toward marital success intensifies the two-fold burden of marked working women. However, working outside the home does not necessarily bring economic independence for women. Unfortunately, in Pakistani society, the male heads continue to exercise control even over the women' income. Often, tension arising out of this results in physical violence on women in our society.

Another distressing aspect of a woman's marital life is control exercised over her body, sexuality and reproductive powers. Often, a married woman has to keep risking pregnancy till at least one male child is born. Her situation is worse when she fails to bear children, particularly, male children. This may provide a good excuse for her husband to take on a mistress or even to remarry. Consequently, she is often subjected to intense family harassment, humiliation and may experience intensified guilt and depression. The truth is that particularly in our system leads to the subordination of women and contributes to a historical pattern of systematic violence directed against wives. Campbell (1989) and Jouriles and Compte (1991) found that women from different cultures and different academic and socio-economic classes respond to "home violence" differently, some as the "hiders", others, as the "escape-goats", the "provokers" or the "care-takers".

Eitzen and Zinn (1989) state that increased wife abuse occurs in poor families because low income husbands are less in a position to live upto their role obligations as their wives are. Therefore, they are less likely to be recognized as the head of the house than their middle class counterparts. When such recognition and resources are lacking, husbands may, in turn use force to control their wives. It may be argued that the high-income and high-achiever husbands have sufficient economic and prestige resources which let them control their wives psychologically without the need to use "force".

The actual statistics on battered wives are difficult to obtain, because, the events generally, take place in private with no witness other than family members. The Pakistani physicians who often treat such victims of domestic violence are reluctant to ask embarrassing questions or conduct thorough probing in this respect. Consequently, much of the harassment and physical violence remains unreported. Our police also refuses to register complaints of wife-beating. Even when unnatural death of wife has occurred, the relatives of the victim find it very difficult to get cases registered as "victims of domestic violence" instead of "accident". Nevertheless, violence within family is presently catching the attention of criminologists lawyers, judges, policy makers, social workers, journalists, psychologists, social scientists, people in the media and public at large. Finally, we have realized that family is not only the source of lòve, sympathy, understanding and unlimited support; at times, it can become the primary source of assault, violence and murder. Jain (1992) concludes that the veneer of family as a harmonious, gentle and supportive institution is cracking from increasing' evidence that suggests that the family is also the sense of varying degrees of violent acts ranging from the punishment of children to slapping, hitting, throwing objects and sometimes homicidal assault by one member of the family on another (Dibble & Straus, 1980 and Dotton, 1988).

Little research work has been done in Pakistan regarding this most sensitive and important topic probably because much of the domestic violence remains unreported in this highly male dominant and oppressive society. The present research is an attempt to improve our awareness and understanding of the psychosocial causes of domestic violence in our society.

## METHOD

### *Sample*

The sample consisted of 30 married females who voluntarily admitted being exposed to domestic violence with an average total monthly income of Rs.1,282 and age mean 35 years.

### *Procedure*

The subjects were selected from different areas of Lahore. Variables, such as , low income of the respondents (total income divided by number of dependents); second marriage, family system (nuclear vs joints); addiction by spouse; barrenness (childlessness) were studied to find out whether there is any relationship between:

1. Economic status of family and domestic violence.
2. Drug addiction of husband and domestic violence.
3. Family system (joint vs nuclear) and domestic violence.
4. Barrenness of wife and domestic violence.

The researcher devised and used a "Personal History Questionnaire", interview schedule and a 15-items scale that measured the frequency of occurrence of various types of violence in an average month. The Personal History Questionnaire and Interview Schedule were constructed in Urdu. Both the tools included questions pertaining to biographical information and different psychological factors that may lead to domestic violence. A pilot study was also conducted to sort out the most valid questions for this purpose. Written Consent Form was signed by each of the subjects who voluntarily decided to participate in this research project. The 15 items Scale (copy attached) for Domestic Violence was devised on the basis of the information given by the subjects of the pilot study pertaining to their exposure to different types of violence and the frequency of it's occurrence in an average month.

## RESULTS

**Table - I(a)**
**Biodata of Wives Exposed to Domestic Violence**

| Subject | Age | Education | Duration of Marriage | No. of Children | Family System |
|---|---|---|---|---|---|
| 1 | 40 | x | 22 | 1 | Joint |
| 2 | 35 | x | 13 | 5 | Nuclear |
| 3 | 45 | x | 20 | 5 | Joint |
| 4 | 30 | x | 10 | x | Joint |
| 5 | 32 | x | 1 | 6 | Nuclear |
| 6 | 34 | x | 18 | 6 | Nuclear |
| 7 | 29 | Primary | 12 | 5 | Nuclear |
| 8 | 33 | Primary | 13 | 2 | Joint |
| 9 | 34 | x | 15 | 4 | Joint |
| 10 | 35 | x | 18 | 5 | Nuclear |
| 11 | 33 | x | 15 | 5 | Nuclear |
| 12 | 30 | x | 12 | x | Joint |
| 13 | 28 | Primary | 10 | 3 | Nuclear |
| 14 | 23 | x | 8 | 3 | Nuclear |
| 15 | 24 | x | 6 | 3 | Joint |
| 16 | 25 | x | 8 | x | Joint |
| 17 | 20 | Middle | 2 | 1 | Joint |
| 18 | 22 | Primary | 4 | 2 | Joint |
| 19 | 27 | x | 8 | 4 | Joint |
| 20 | 29 | Matric | 10 | x | Joint |
| 21 | 28 | x | 10 | 4 | Joint |
| 22 | 40 | x | 18 | 7 | Joint |
| 23 | 30 | x | 15 | 6 | Nuclear |
| 24 | 23 | x | 5 | 3 | Joint |
| 25 | 35 | Primary | 16 | 4 | Joint |
| 26 | 20 | x | 6 | 1 | Joint |
| 27 | 35 | x | 20 | 9 | Nuclear |
| 28 | 19 | x | 5 | 2 | Nuclear |
| 29 | 30 | Middle | 10 | 4 | Nuclear |
| 30 | 28 | X | 7 | 2 | Nuclear |
| | $\overline{X}$=35 | | - | $\overline{X}$=4 | |

## Table I (b)

## Biodata of Husband

| Subject | Age | Education | Job | Income |
|---|---|---|---|---|
| 1 | 70 | Uneducated | Factory Worker | 3000.00 |
| 2 | 40 | Uneducated | - | - |
| 3 | 55 | Uneducated | Conductor | 500.00 |
| 4 | 32 | Uneducated | Medicine Company | 2000.00 |
| 5 | 35 | Middle | Peon | 1300.00 |
| 6 | 36 | Uneducated | - | - |
| 7 | 34 | Matric | Mill worker | 2200.00 |
| 8 | 40 | Matric | Shopkeeper | 1500.00 |
| 9 | 40 | Matric | Factory worker | 1800.00 |
| 10 | 42 | Middle | Labourer | 1200.00 |
| 11 | 40 | Middle | Driver | 1000.00 |
| 12 | 34 | Matric | Factory worker | 2400.00 |
| 13 | 35 | Middle | Salesman | 800.00 |
| 14 | 28 | Middle | Factory worker | 1500.00 |
| 15 | 30 | Middle | Factory worker | 1200.00 |
| 16 | 27 | Uneducated | Sweeper | 1150.00 |
| 17 | 30 | Uneducated | Soldier | 1500.00 |
| 18 | 26 | F.A. | Labourer | 1000.00 |
| 19 | 32 | Uneducated | Labourer | 500.00 |
| 20 | 35 | Primary | Clerk | 2500.00 |
| 21 | 30 | Uneducated | Driver | 1200.00 |
| 22 | 55 | Primary | Factory worker | 1000.00 |
| 23 | 40 | Uneducated | Farmer | 600.00 |
| 24 | 26 | Matric | Shopkeeper | 1500.00 |
| 25 | 40 | Primary | Salesman | 800.00 |
| 26 | 25 | Uneducated | Furniture maker | 3000.00 |
| 27 | 70 | Uneducated | Labourer | 1000.00 |
| 28 | 35 | Uneducated | Labourer | 500.00 |
| 29 | 38 | F.A. | Factory worker | 1200.00 |
| 30 | 32 | Uneducated | Peon | 600.00 |
| | $\overline{X}$=38 | | | $\overline{X}$=1282.00 |

## Table II

## Subject Exposure to Domestic Violence

### Types of Violence (No. of Occurrence in One Month)

| Subject | Verbal Threat | Abusive Language | A Slight Slap | Pushing | Shoving | Kicking | Punching | Boxing | Choking | Throwing Things Around | Burning | Injury House body Object | Injury with Weapon | Throwing Acid on face | Forced Sex |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3.00 | 6.00 | 4.50 | - | - | - | 3.00 | - | - | - | - | 1.50 | - | - | - |
| 2 | 2.00 | 7.00 | 2.00 | 4.50 | 3.00 | 5.00 | 3.50 | - | - | 7.00 | - | - | - | - | 4.50 |
| 3 | 6.00 | 8.00 | 4.00 | 3.00 | 2.00 | - | 4.00 | - | 3.00 | - | - | 1.00 | - | - | 3.00 |
| 4 | 5.50 | 7.00 | 4.50 | 2.00 | - | - | 2.50 | - | - | 5.00 | - | 1.00 | - | - | 7.00 |
| 5 | 7.00 | 7.00 | 3.50 | 2.00 | 1.00 | - | 2.00 | - | - | - | - | 1.00 | - | - | 4.00 |
| 6 | 5.00 | 7.00 | 5.00 | 3.00 | 2.00 | 5.00 | 2.50 | - | - | - | - | 2.50 | - | - | 2.00 |
| 7 | 4.00 | 8.00 | 4.00 | 2.00 | 2.00 | - | 5.50 | - | - | - | - | 3.00 | - | - | 4.00 |
| 8 | 5.00 | 8.00 | 3.50 | 3.00 | - | - | 3.00 | - | - | 3.00 | - | 1.00 | - | - | - |
| 9 | 5.00 | 6.50 | 3.50 | 3.50 | - | - | 1.00 | - | - | 8.00 | - | 4.00 | - | - | 5.00 |
| 10 | 5.50 | 8.00 | 9.00 | 3.00 | 2.50 | 4.50 | 7.00 | 3.00 | - | 5.50 | - | 1.00 | - | - | 4.00 |
| 11 | 5.00 | 8.00 | 4.00 | 3.00 | - | 1.00 | 2.00 | - | - | 5.00 | - | 1.00 | - | - | 4.00 |
| 12 | 4.00 | 9.00 | 6.50 | 4.50 | 2.50 | 3.00 | 5.50 | 2.00 | - | 8.00 | - | 2.00 | - | - | 3.50 |
| 13 | 2.50 | 9.00 | 5.00 | 4.00 | 3.00 | 5.00 | 7.00 | - | 2.00 | - | - | 4.00 | - | - | 6.00 |
| 14 | 5.00 | 8.00 | 3.50 | 4.50 | - | - | 3.50 | - | - | - | - | 2.00 | - | - | - |
| 15 | 3.50 | 5.50 | 3.00 | 3.00 | 2.00 | - | 3.50 | - | - | 2.00 | - | 1.00 | - | - | - |
| 16 | 5.50 | 7.00 | 5.00 | 4.50 | 4.00 | 2.00 | 6.00 | - | - | - | - | 3.00 | - | - | 1.00 |
| 17 | 3.50 | 7.00 | 3.00 | 3.00 | - | 1.00 | 2.00 | - | - | 2.00 | - | - | - | - | - |
| 18 | 5.00 | 8.00 | 5.00 | 4.00 | 1.00 | 2.00 | 6.00 | - | - | 2.00 | - | 4.00 | - | - | 4.00 |
| 19 | 4.00 | 5.00 | 4.00 | 2.00 | - | - | 3.00 | - | - | 2.00 | - | 3.00 | - | - | - |
| 20 | 8.00 | 5.00 | 4.00 | 3.00 | 2.00 | - | 3.00 | 3.00 | - | 3.00 | - | 1.00 | - | - | 2.00 |
| 21 | 8.00 | 6.50 | 6.00 | 3.00 | - | 2.00 | 3.00 | - | - | 4.50 | - | 2.50 | - | - | 4.00 |
| 22 | 9.00 | 5.50 | 4.50 | 4.50 | 3.50 | 3.50 | - | - | - | 4.00 | - | 4.50 | - | - | 5.50 |
| 23 | 5.00 | 8.00 | 6.00 | 3.00 | - | 3.00 | 3.50 | - | - | 3.00 | - | 2.00 | - | - | 3.00 |
| 24 | 5.00 | 7.00 | 5.00 | 3.00 | - | 2.00 | 5.40 | - | - | - | - | 3.00 | - | - | 4.00 |
| 25 | 5.50 | 5.50 | 4.00 | 3.00 | - | - | 5.00 | - | 1.00 | 2.00 | - | 1.00 | - | - | 3.00 |
| 26 | 4.50 | 5.00 | 3.50 | 3.00 | - | - | 3.50 | - | - | - | - | 1.00 | - | - | 4.00 |
| 27 | 6.00 | 7.00 | 2.00 | 2.00 | 1.00 | 3.00 | 4.00 | - | - | 4.50 | - | - | - | - | 2.00 |
| 28 | 5.50 | 9.00 | 5.50 | 4.50 | 4.50 | 3.50 | 3.50 | - | 1.50 | 6.50 | - | 4.50 | - | - | 5.50 |
| 29 | 7.00 | 7.00 | 5.50 | 4.00 | 1.00 | - | 4.00 | - | 1.00 | 6.50 | - | 4.50 | - | - | 3.50 |
| 30 | 5.50 | 9.00 | 7.00 | 4.00 | 3.50 | 3.00 | 3.00 | - | - | 5.50 | - | 2.00 | - | - | 1.00 |
| X= | 5.167 | 7.133 | 4.667 | 3.233 | 1.350 | 1.533 | 3.763 | 0.167 | 0.317 | 2.967 | 0.000 | 2.067 | 0.000 | 0.000 | 2.983 |

## DISCUSSION

Table II indicates that all the subjects reported being exposed to verbal threats of violence, abusive language, a little slap, pushing, shoving, kicking, punching, biting, choking, throwing things around, burning, injury with household objects, injury with a weapon, throwing acid on face or body and forced sex. However, burning, injury with a weapon, throwing acid on face or body were not reported by anyone of the respondents, probably, because the sample was relatively small in size. Nevertheless, chi-square with Yate's correction did not indicate any significant relationship between different types of violence and drug addiction by husbands contrary to the findings of Eisenbery & Micklow (1977); Gelles (1974); and Roy (1977) which suggest a strong relationship between alcohol use and marital violence.

Though Dibble & Straus (1980) found that violence against spouses decreases as income increases, the current result could not support this hypothesis, probably because the sample was small in size and not very divergent in terms of subjects's financial status in the presence of the prevailing economic depression in the Pakistani society. Moreover, domestic violence was found in both the joint family and nuclear family system. Majority of the wives complained that their husbands did not even care for their basic psycholosocial needs; did not involve them in making decisions, did not take them for recreation and did not give them enough time nor money for domestic expenditures. Yet, they would often indulge in aggressive outbursts and initiate quarrels over minor family, financial or personal issues.

It is worth-mentioning that lack of understanding between spouses, maltreatment by husband, absence of children and serious financial problems often aggravated tension in the nuclear family resulting in episodic exchange of domestic violence. Another contributing factor could be the poor academic status of husbands and their deficient problem solving strategies which aggravated pre-existing adjustment problems of the spouses. However, more research work on relatively larger sample from socio-economically and culturally diverse population is needed to understand and prevent domestic violence in the Pakistani society. Once we have accomplished this task, we can teach couples communication behaviors that are alternative to hostile and negative interaction patterns that may escalate to violence in some couples.

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# SOCIAL COMPARISON SCALE: A PRELIMINARY REPORT

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## ABSTRACT

In an attempt to construct a scale for normal young population incidental samples of post graduate students' populations were requested to participate in scale construction. Dimensions of social comparison were received from students' populations. The students' consensus was the basis of dimension selection. Both the temporal stability and internal consistency of the scale were found to be sufficiently high. The reasonable association of the scale with other scales and reasonable differentiation of one group from another group of female students were taken as the two indices of the validity of the social comparison scale.

## INTRODUCTION

Man does not live alone. He lives among his fellow-beings. Since he lives among his fellow-beings, he has instinctive tendency to compare his attributes and attitudes with that of others. Comparing one's self with otherselves is what Festinger (1954) describes as social comparison, and Goethals, (1986), Latane (1966), and Suls and Millers, (1977) describe as social reality.

In comparing ourselves with others, Festinger (1954) suggests that we should look toward those who are slightly better off than what we are but not too much so, for reason that people who are slightly better off provide helpful information to us. It has been found that comparing with people who are better off produces pathological symptoms like jealousy (Salovey & Rodin, 1984), hostility (Testa & Major 1990), frustration (Martin, 1986) and lowered self-evaluations (Marsh & Parker, 1984; Morse & Gergen, 1970) and comparing with people who are worse off enhances subjective well-being (Hakmiller, 1966; Taylor, Wood & Lichtman, 1983, Wills, 1981, 1987, 1991, Wood, Taylor & Lichtman, 1985). It becomes clear that both the yardstick, upward and downward, are not good for psychological health. Upward comparison is painful and downward comparison is misleading. The reasonable yardstick is people who are generally similar to us (Castore & DeNinno, 1977; Goethals & Darley, 1977). On people variables such as age, sex, interest, job one finds himself similar to others. Among these variables, sex is the strongest variable which does not change with time.

As far as the development of social comparison scale is concerned, the authors of this article know only about a scale developed by Allan & Gilbert (1995). Gilbert and Allan developed a social comparison scale on global dimensions considered to be relevant to relative judgments of rank and status. To this effect, they used five bipolar constructs: inferior – superior, less competent – more competent, likeable – less likeable, less reserved – more reserved, left out – accepted. This set of items was referred to collectivity as social comparison (rank). Allan and Gilbert (1955) expanded the scale to 11 items and found its internal consistency better i.e. 0.91.

The important point to be reported here is that Allan and Gilbert (1995) based the construct of the scale on the basis of their discussion with clinicians about the salient dimensions used by the patients.

The dimensions of the social comparison scale reported here have been received from the post graduate students (i.e. normal men and women). As such the scale based on the opinions of normal people is for normal people and may also be taken to be a yardstick for comparison of problem people.

## METHOD

### *Sample*

Incidental samples of different numbers of post graduate male and female students participated at different stages of Social Comparison Scale (SCS) construction.

### *Procedure*

The following procedure was adopted for the collection and selection of social dimensions over which people usually compare themselves with people of their sex around them.

1. Adopting the incidental sampling, 400 male and female students were asked both individually and in group to provide a list of social dimensions over which they usually compare themselves with people of their sex around them. (There was no age variations between the two groups [F (1, 398) = .30, p > .05)]. In this way 15 social dimensions were collected.

2. The percentage of consensus of the mixed sample of 164 students was worked out regarding dimensions over which people generally compare themselves with their sex around them. The 50% and above 50% were taken to be the criterion of selection of dimensions. In this way, 9 dimensions were selected, (See Appendix).

3. A list of fill-in-the-blank-statements (For example, I ____________ compare my honesty with that of people of my sex around me) was phrased with the instructions to the person taking the scale to report the frequency of comparison (i.e. sometimes, often and very often) he/she makes on alphabetically arranged social dimensions with his/her sex around him/her.

4. Incidental samples of 50 men and 50 women were asked to report the extent to which the language both of the instruction part and

statements is comprehensible. All the respondents Okayed the comprehensibility of the scale.

## RELIABILITY

The scale was administered twice to incidental samples of 102 men and 107 women with a gap of 6 and 7 weeks between the two administrations respectively with the assumption that test – retest scores remain the same with the passage of time. Pearson rs separately run over the data show that dimensionwise correlation coefficients are sufficiently stable for both samples. The correlation coefficients range from 0.77 to 0.84 for women and 0.70 to 0.83 for men sample.

**Table I**
**Temporal stability of the scale**

| | Women N=107 | | Men N=102 | | |
|---|---|---|---|---|---|
| **Dimensions** | **Pearson r** | **t value** | **Pearson r** | **t value** | **Z value** |
| Achievement | .80 | 13.66 | .83 | 14.87 | .64 |
| Confidence | .79 | 13.20 | .80 | 13.33 | .20 |
| Health | .83 | 15.24 | .79 | 12.88 | .84 |
| Living | .82 | 14.68 | .70 | 9.80 | .83 |
| Persuasiveness | .79 | 13.20 | .71 | 10.08 | 1.33 |
| Physique | .84 | 15.88 | .78 | 12.48 | 1.27 |
| Popularity | .81 | 14.16 | .77 | 12.06 | .77 |
| Responsibility | .77 | 12.36 | .82 | 14.33 | .99 |
| Social Status | .83 | 15.24 | .81 | 13.82 | .44 |
| Average | .80 | 14.18 | .78 | 12.62 | .81 |

The t values show that Pearson rs are significant beyond .001 level, ranging from 12.36 to 15.88 (average t value = 14.18) and 9.80 to 14.87 (average t value = 12.62) for women and men samples respectively.

The Z was also calculated to determine the significance of the difference between the correlation coefficients obtained from the two independent samples; women and men. Since Z values are small it is not correct to assume that there is a difference between the natures of scores on each social dimension in both samples. The average correlation coefficients were .80 and .78 for women and men respectively. The Cronbach alpha for the first total scale score for women sample was .81 and for men sample was .79. In short scores on social comparison scale were sufficiently both stable and consistent.

## VALIDITY

Table II shows that the total score of the scale was positively associated with depression, jealousy and shyness to an average significance level of .007 and negatively associated with self-esteem, optimism, zest for life, and satisfaction with life to an average significance level of -.001.

**Table II**
**Correlations between scale and other measures**

| | N | r | p |
|---|---|---|---|
| SC- Depression (Rodloff, 1977) | 57 | .37 | =.01 |
| SC- Jealousy (Bringle, et al 1979) | 62 | .44 | <.001 |
| SC- Shyness (Cheek, et al 1980) | 45 | .39 | =.01 |
| SC- Self-esteem (Rosenberg, 1965) | 36 | - .53 | =.001 |
| SC- Zest for life (Khalique, unpublished scale) | 54 | - .49 | <.001 |
| SC- Optimism (Scheir, et al 1994) | 48 | - .53 | <<.001 |
| SC- Satisfaction with life (Diner, et al 1985) | 40 | - .51 | <<.001 |

It may be interpreted to mean that social comparison scale seems to have both discriminate validity and convergent validity.

Physical attractiveness was measured by the live method (i.e., three volunteer women judged the physiques of their fellow-women engaged in talking to each other in college life settings, for example in corridor, canteen, common room etc, decided who was attractive and who was unattractive, and finally collected the date from them).

**Table III**
**Dimensionwise and total score differences between attractive and unattractive women**

| N = 17 Attractive Women | | N = 17 Unattractive Women | | |
|---|---|---|---|---|
| **Dimension** | **Mean** | **Mean** | **t** | **p** |
| Achievement | 1.12 | 2.76 | 4.61 | <<.001 |
| Confidence | 2.35 | 2.56 | 1.96 | Insig. |
| Health | 2.12 | 1.76 | 1.54 | Insig. |
| Living | 1.95 | 1.41 | 1.37 | Insig. |
| Persuasiveness | 1.41 | 2.35 | 4.7 | <<.001 |
| Physique | 1.59 | 2.52 | 3.88 | <.001 |
| Popularity | 2.35 | 2.64 | 0.78 | Insig. |
| Responsibility | 2.23 | 2.41 | 0.81 | Insig. |
| Social Status | 1.76 | 2.35 | 3.71 | .001 |
| Total Scale Score | 16.88 | 20.76 | 4.645 | <<.001 |

Beautiful women are reported to have higher global self-esteem (Feingol, 1992). In view of this self-perception, it may not be considered unreasonable for attractive women to make a globally less comparison with other women (unattractive women) around them (Table III, attractive women's Mean=16.88; unattractive women's Mean=20.76, p<<.001). The dimensionwise comparison shows that attractive women significantly compare themselves less than what other women do (for example, on achievement dimension attractive women's Mean=1.12, unattractive women's Mean=2.76, p<<.001), on persuasiveness (attractive women's Mean=1.41, unattractive women's Mean= 2.35, p<<.001) on physique (attractive women's Mean=1.59; unattractiveness women's Mean=2.52, p<.001), and on social status dimension (attractive women's Mean=1.76, unattractive women's Mean=2.35, p.001). On confidence, health, living, popularity and responsibility dimensions groups do not differ. This may be interpreted to mean that these five dimensions may be having equal social value.

## CONCLUSION

It may be concluded that social dimensions, derived from students' population and selected on the basis of their 50% and above 50% consensus constituted a scale described as social comparison scale. To determine its psychometric ingredients, the temporal stability of scores on each dimension of comparison was worked out and it was found to range from .77 to .84 and .70 to .83 for women sample and men sample respectively. Fisher's t value was also worked out to test the significance of the Pearson rs run for determining the temporal stability. An average of correlation coefficient was found to be .80 for women sample and .78 for men sample. Z value calculated to test the significance of the correlation coefficients for the two independent samples showed that test-retest scores considerably remain the same for both the samples. Internal consistency was also found to be .81 and .79 for women and men samples respectively. To determine the extent to which the scale is valid, the scale was correlated with seven measures. The scale was found to be positively associated with depression, jealousy and shyness to an average significance level of .007, and negatively associated with self-esteem, zest for life, optimism, and satisfaction with life to an average significance level of -.001. The reasonable association of the scale with other scales is one index of the validity of the scale.

Physically attractive women differ from unattractive women on four social dimensions, viz. achievement, persuasiveness, physique and social status. The reasonable difference, to an average significance level of .001 is second index of the validity of the scale.

Validity is a process. Much is needed to be done in order to establish the validity of the scale. As such, the present work is simply a preliminary report on the construction of social comparison scale.

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## APPENDIX

## SOCIAL COMPARISON SCALE

Given below is a set of nine fill-in-the-blank-statements. They are alphabetically arranged social dimensions. Read them well and make a sincere rating of yourself on each dimension in comparison to people of your sex around you on the following 3-point scale.

Sometimes (1) Often (2) Very often (3)

Example: I often compare my honesty with that of people of my sex around me.

I .......... compare my achievement with that of people of my sex around me.

I .......... compare my confidence with that of people of my sex around me.

I .......... compare my health with that of people of my sex around me.

I .......... compare my living with that of people of my sex around me.

I ......... compare my persuasiveness with that of people of my sex around me.

I .......... compare my physique with that of people of my sex around me.

I .......... compare my popularity with that of people of my sex around me.

I .......... compare my responsibility with that of people of my sex around me.

I .......... compare my social status with that of people of my sex around me.

**Name** **Sex** **Class/Organization**

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# DIFFERENCES IN ACADEMIC ACHIEVEMENT BETWEEN CHILDREN IN SCHOOLS SITUATED IN QUIET AND NOISY AREAS

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## ABSTRACT

This study attempts to investigate the differences in the academic achievement of children studying in schools situated in quiet and noisy areas. Wide Range Achievement Test – Revised (Level- 11) was applied to find out the differences in academic achievement of children belonging to both types of schools. Results revealed that children from schools situated in quiet areas had significantly better scores on reading ($t= 3.847$, $P<.001$), spelling ($t=4.693$, $P<.01$) and arithmetic ($t= 3.297$, $P<.001$) sub-tests as compared to children belonging to schools situated in noisy area.

## INTRODUCTION

Modern life involves the production of noise. Although, noise does not alter or damage the environment physically or chemically as do the pollutants of air and water, it is considered a pollutant when it is present in sufficient quantity and intensity to cause psychological and emotional stresses or physiological damage to the people in the environment.

Noise is a psychological concept and is defined as a sound that is unwanted by the listener because it is unpleasant, bothersome, interferes with important activities (Cohen and Weinstein, 1981).

At psychological level noise has the strongest effects when it is uncontrollable and unpredictable and interferes with people's ability to communicate or to accomplish a task such as studying. Laboratory studies of noise indicate that unpredictable and uncontrollable noise is bothersome and stressful (Fisher, Bell and Baun, 1984), and has negative impact on people's feelings, thoughts and actions (Gardner, 1978).

It also affects task performance that demand most attention (Cohen & Weinstein, 1981), tolerance for frustration, social behaviour, aggressiveness, exploitative behaviour, liking for others and general irritability in interpersonal relationships (Glass & Singer, 1972).

Naturalistic studies of the psychological, interpersonal and physiological consequences of living to noisy freeways, subways, trains and airports, reveal decrements in intellectual development and scholastic performance among children (Cohen, Evans, Krantz, Stockols & Kelly, 1981). Among the effects of noisy homes and schools are impairment in scholastic achievement which leads to frustration.

Conhen, Glass and Singer (1973), who measured reading achievement and ability to make auditory discrimination of children who lived on lower noisier floors of apartment buildings found more learning problems and poorer reading skills as compared to children who lived on the upper floors of the same building. Similar results were found by Crook and Langdon (1974) and Heft (1979).

Reading achievement scores of children also differ according to their exposure to noise. It has been found that the poorer readers in the some school came from the noisier side of the school building (Bronzaft & McCarthy, 1975). Moreover, as noise disrupts the teaching – learning process resulting eventually in cumulative deficits, may be responsible for the poorer scholastic performance among children living or attending school in noisy neighbourhood.

Researches on the effect of noise on children's studies and on their cognitive abilities revealed that children whose school was near the airport made more errors on a puzzle task, had higher blood pressure and were likely to give up the tasks than children in quiet school (Cohen et al., 1981). Also the longer the children had been at the noisy school, the more distractible he or she was when working on a task and their performance was affected more even after the noise was reduced. Another potential effect of noise is that it is likely to make the individual less responsive to the environment (Mathews & Cannon. 1975). Those who work in extremely noisy environment are more aggressive, distrustful and irritable than those who work in a quieter surroundings (Donnerstein & Wilson, 1976). Noise may make angry people more aggressive (Azrin, 1958, Blum, 1967 and Geen, 1978).

It also causes people to focus their attention on a constricted portion of their environment which may lead to more extreme and premature judgements about others (Siegal and Steels 1980).

A review of the research on the adverse effects of noise indicate that it has both physiological and psychological effects. It has negative effects, especially when we are working on complex tasks. Exposure to noise causes people to narrow their attention. As a result of this performance on some tasks like simple problems or visual performance may actually improve because the individual pays close attention to task. However, performance, becomes impaired on more complex tasks requiring coordination or reasoning (Broadbent, 1978).

So far the investigations have focused primarily on either reading achievement or hearing ability or any problem solving task etc. The present research attempts to study the effects of noise on academic achievement which requires attention, alertness, hearing and reasoning ability as measured by reading, spelling and mathematical achievement of children ages 13 years to 16 years.

It is assumed that children who study in schools situated in quiet area will have significantly better reading spelling and arithmetic achievement as compared to children who study in schools situated in noisy areas.

## METHOD

### *Sample*

The sample of the study consists of 200 school children who were selected from 4 English Medium schools of Karachi. 50 girls and 50 boys were selected from two schools situated in quiet and similarly 50 boys and 50 girls were selected from two schools in noisy area.

Noisy areas were selected on the premise that the schools were situated on main roads that were busy with at least two bus routes on the road. On the other hand schools in the quiet area were situated in residential areas and had no bus routes on those lanes. Age range of the children were between 13 to 16 years and studying in $8^{th}$ to $10^{th}$ grades. All subjects were studying in matric system.

### *Material*

Wide Range Achievement Test – Revised, Level II was to test reading, spelling and arithmetic.

### *Procedure*

Most part of the test was administered in group situation. The subjects were first given the Spelling subtest of WRAT-R with the following instructions:

"This is a spelling test. I would like to see how many of these words you can spell. I'll say the words, then read a sentence with a word in it, then say the word to be spelled again. Write the first word on the line marked "I" and go down the column following the numbers of the word as I read them."

The examiner practised the words through pronunciation guide provided in the WRAT-R manual in advance. The words were read clearly along with their ordinal numbers, keeping a 15 seconds interval between the words.

After completing the spelling sub-test, the arithmetic sub-test was performed for which the subjects were given instruction as follows:

"I'd like to know how many of the problems on these two pages you can figure out. Look at each problem carefully to see what you are supposed to do-add, subtract, multiply or divide and then put down your answer in the space on or under the line of the problem. Should you wish to figure on the paper, you may use the empty spaces or the margins to write on. First do the top row on the first page, then the second row and then the third row etc. The problem get more difficult, as you go down the page and to the next. Don't spend too much time on any one problem. You can skip a problem if it is too difficult for you, but do as many as you can one by one. You will have 10 minutes. Now, go ahead and do as many as you can. Don't forget the second page".

Time was noted as soon as the subjects started doing those sums and they were asked to stop after 10 minutes were over.

Reading sub-test was carried out in the last and it was performed individually. The examiner practiced the words through pronunciation guide provided in the WRAT-R manual in advance. Each subject was called in and was given the following instructions after pointing to the first word "milk".

"Look at each word carefully and say it aloud. Begin here (Point) and read the words across the page so I can hear you. When you finish the first line, go on the next line and then the next, etc".

With these instructions each subject was given the list. The first time a reading error would occur the subject was asked to say the word again and was scored on the second trial. From then, the first response was scored as either right or wrong, unless the subject spontaneously corrected the error he/she had made.

Scoring for the WRAT-R level II was also done in accordance with the WRAT-R manual. Each correct response was scored as I and the pre-reading, pre-spelling and the pre-arithmetic points were added to the total of each sub-test.

The raw scores, thus obtained were then converted into standard scores, percentiles and grade equivalents. However, for the calculation purpose only standard scores were taken into consideration.

To evaluate the significant difference in the WRAT-R scores of children studying in noisy and quiet area, t-test was applied.

## RESULTS

**Table I (a)**

**Differences in the Reading scores between girls from noisy and quiet areas**

| | | | | |
|---|---|---|---|---|
| X1 | (Quit Area) | | = | 112.52 |
| X2 | (Noisy Area) | | = | 103.62 |
| t = | 2.940 | df | = | 98 |
| p < | .01 | | | |

**Table I (b)**

**Differences in the Spelling scores between girls from noisy and quiet areas**

| | | | | |
|---|---|---|---|---|
| X1 | (Quit Area) | | = | 106.46 |
| X2 | (Noisy Area) | | = | 98.08 |
| t = | 3.868 | df | = | 98 |
| p < | .01 | | | |

**Table I (c)**
**Differences in the Arithmetic scores between girls from noisy and quiet areas**

| | | | | |
|---|---|---|---|---|
| X1 | (Quit Area) | | = | 90.24 |
| X2 | (Noisy Area) | | = | 80.74 |
| t = | 3.66 | df | = | 98 |
| p < | .01 | | | |

**Table II (a)**
**Differences in the Reading scores between boys from noisy and quiet areas**

| | | | | |
|---|---|---|---|---|
| X1 | (Quit Area) | | = | 108.00 |
| X2 | (Noisy Area) | | = | 100.82 |
| t = | 2.496 | df | = | 98 |
| p < | .01 | | | |

**Table II (b)**
**Differences in the Spelling scores between boys from noisy and quiet areas**

| | | | | |
|---|---|---|---|---|
| X1 | (Quit Area) | | = | 99.52 |
| X2 | (Noisy Area) | | = | 95.66 |
| t = | 1.62 | df | = | 98 |
| p < | .01 | | | |

**Table II (c)**
**Differences in the Arithmetic scores between boys from noisy and quiet areas**

| | | | | |
|---|---|---|---|---|
| X1 | (Quit Area) | | = | 106.46 |
| X2 | (Noisy Area) | | = | 98.08 |
| t = | 3.868 | df | = | 98 |
| p < | .01 | | | |

**Table III (a)**
**The overall differences in the Reading scores between children from noisy and quiet areas**

| | | | | |
|---|---|---|---|---|
| X1 | (Quiet Area) | | = | 110.26 |
| X2 | (Noisy Area) | | = | 102.22 |
| t = | 3.847 | df | = | 198 |
| p < .001 | | | | |

GRAPH NO.a, SHOWING THE DIFFERENCE IN THE READING ACHIEVEMENT BETWEEN BOYS AND GIRLS FROM NOISY AND QUIET AREAS

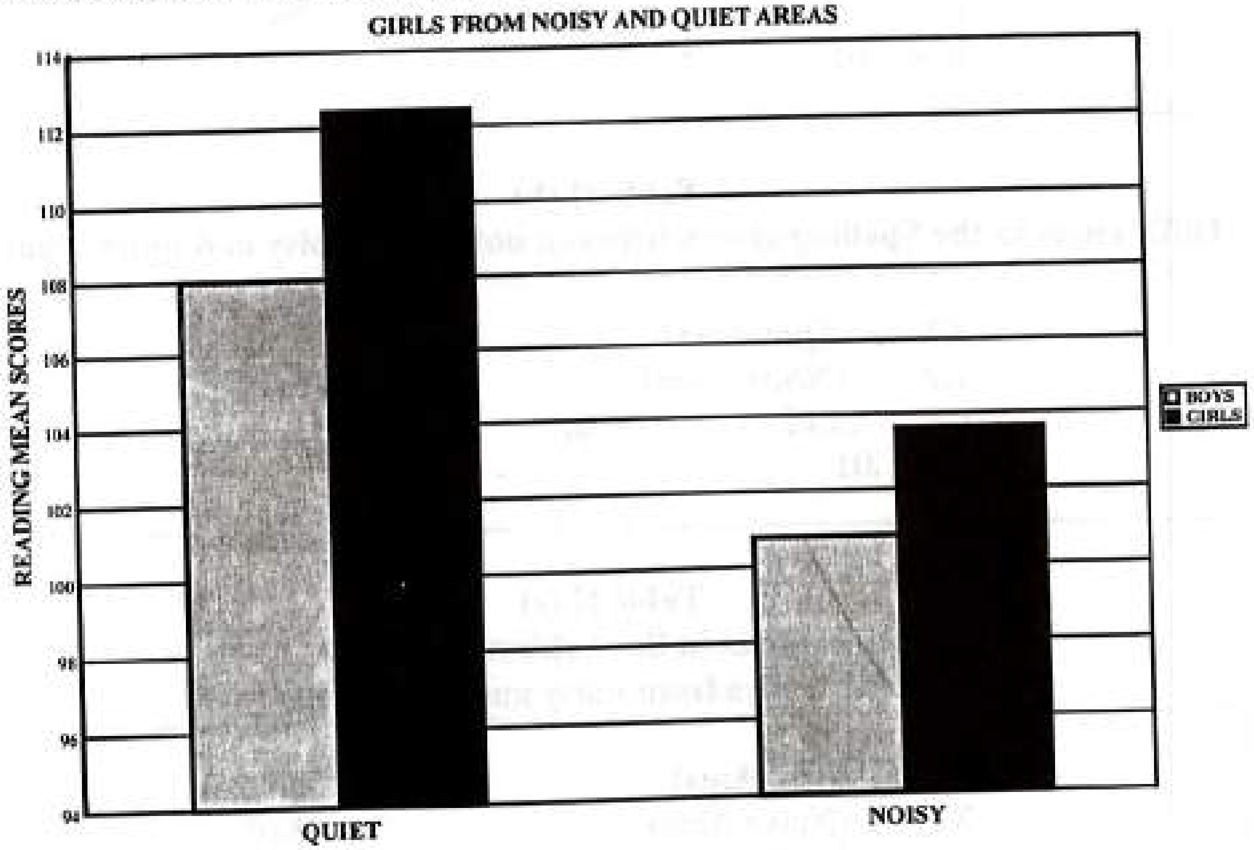


**Table III (b)**
**The overall differences in the Spelling scores between children from noisy and quiet areas**

| | | | | |
|---|---|---|---|---|
| X1 | (Quiet Area) | | = | 102.99 |
| X2 | (Noisy Area) | | = | 96.87 |
| t = | 4.693 | df | = | 198 |
| p < | .001 | | | |

GRAPH NO.b, SHOWING THE DIFFERENCE IN THE SPELLING ACHIEVEMENT BETWEEN BOYS AND GIRLS FROM NOISY AND QUIET AREAS

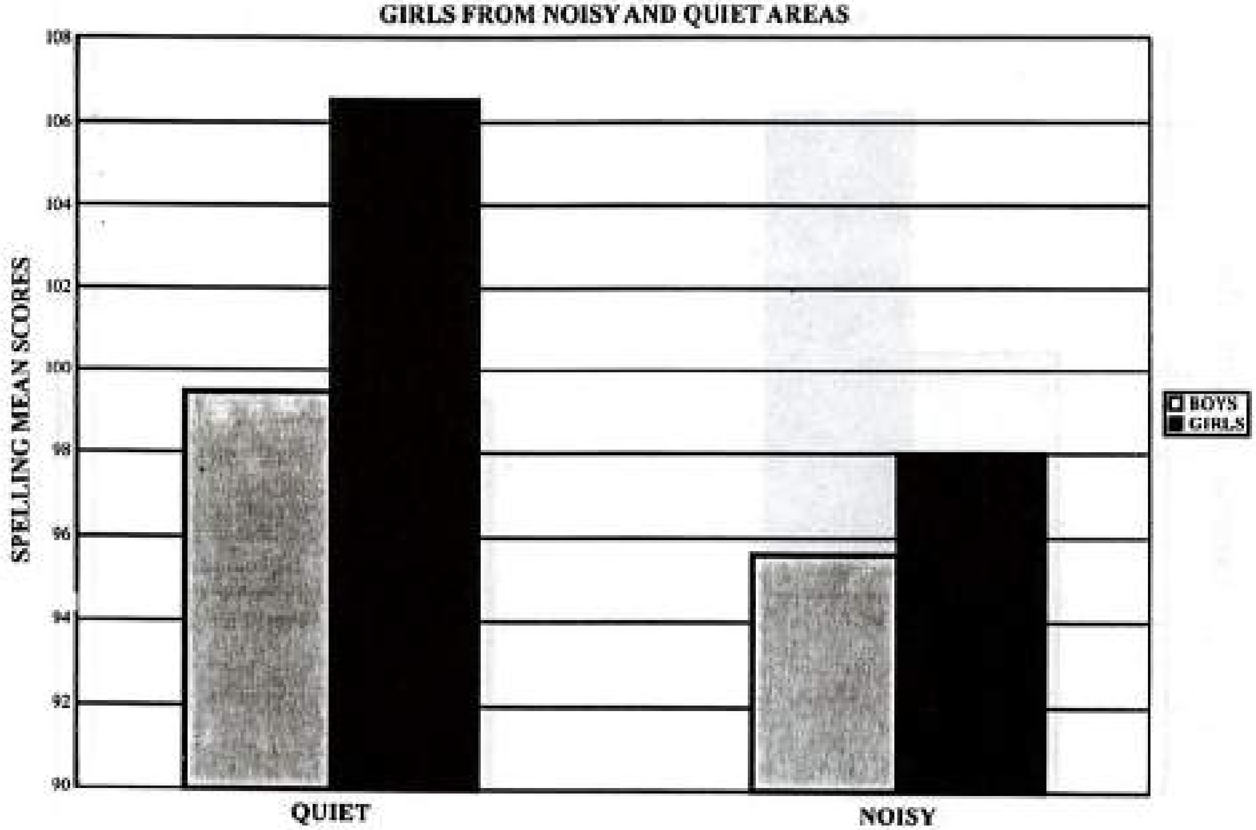
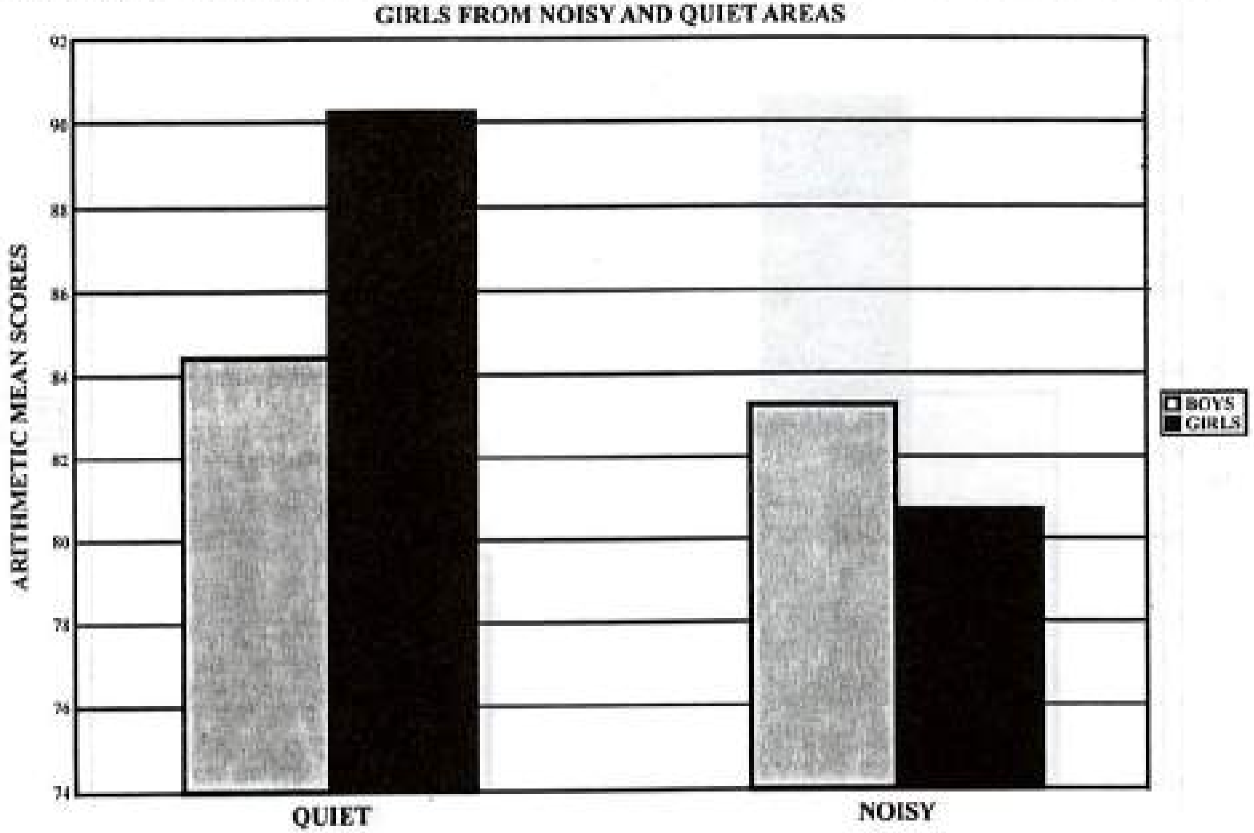


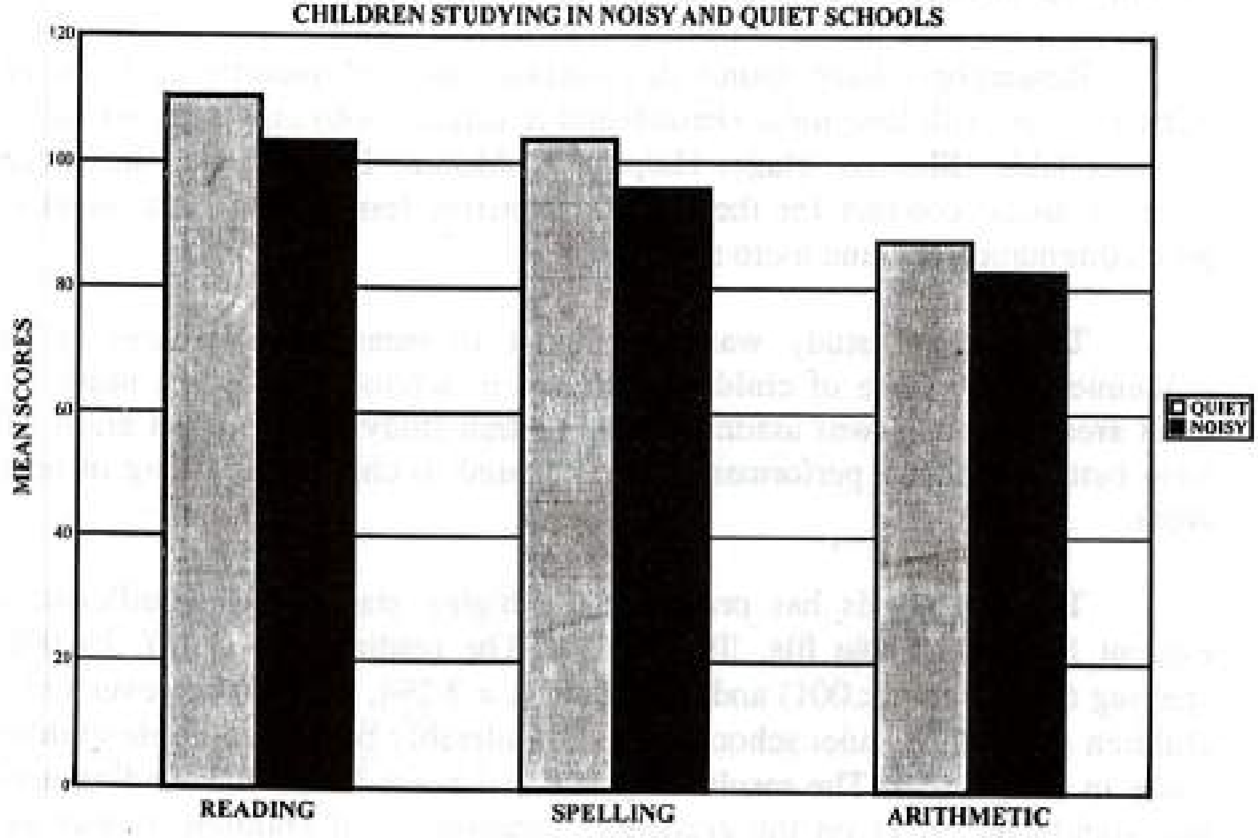
**Table III (c)**
**The overall differences in the Arithmetic scores between children from noisy and quiet areas**

| | | | | |
|---|---|---|---|---|
| X1 | (Quiet Area) | | = | 87.32 |
| X2 | (Noisy Area) | | = | 81.93 |
| t = | 3.297 | df | = | 198 |
| p < .001 | | | | |

GRAPH NO.c, SHOWING THE DIFFERENCE IN THE ARITHMETIC ACHIEVEMENT BETWEEN BOYS AND GIRLS FROM NOISY AND QUIET AREAS



GRAPH NO.d, SHOWING DIFFERENCE IN THE OVERALL ACADEMIC ACHIEVEMENT BETWEEN CHILDREN STUDYING IN NOISY AND QUIET SCHOOLS



## DISCUSSION

The world is becoming noisier day after day and unless you in a specially constructed soundproof chamber, you are always exposed to noise. For those with normal hearing, sound is one of the most important means of knowing about and experiencing the world. However, psychologists are specially concerned about the effects of noise and because so much of modern industrial life involves the production of noise and because the amount of noise to which people are exposed in cities is often extremely high. In fact, the most striking aspect of cities is their constant high noise levels.

Researchers have found that certain kinds of monitoring tasks are difficult to do with loud noise (Broadbend & Little, 1960) especially when it is uncontrollable (Sherrod, Hage, Halpern & Moore, 1977) It also influences people's social conduct for they less responsive, less helpful, less attentive, poor communicators, and more aggressive.

The present study was an attempt to measure differences in the academic performance of children studying in schools situated in noisy and quiet areas. Hence it was assumed that children studying in a quiet areas will have better academic performance as compared to children studying in noisy areas.

The hypothesis has proved to be highly statistically significant, as evident from the Table IIIa, IIIb and IIIc. The reading ($t = 3.847$, $P<.001$). spelling ($t = 4.693$, $p<.001$) and arithmetic ($t = 3.294$, $P<.001$) achievement of children studying in quiet schools were considerably better than those children study in noisy areas. The results suggests that noise in the surrounding areas had significant effect on the academic performance of children. It was also found that children studying in noisy areas made more errors in the spelling and mathematical tasks and were more likely to give up as compared to children studying in the quiet schools.

The separate analysis of each sub test indicates that the differences in the performance was most pronounced on the reading task. (Table No. Ia& IIa).

It was also noted that girls from both quiet and noisy area schools generally performed better on the achievement test as compared to boys. This can perhaps be attributed to social factors because in Pakistan generally the boys are reared with more acceptance and appreciation as compared to girls and the girls have to work hard to receive such appreciation. Such attitude results in high competition and better performance among girls. The statistics of Matric, Intermediate and Entry test for M.B.B.S revealed that girls excelled boys in all these examination/tests. (Daily Dawn, 1999).

An interesting thing that was seen in the study was that the performance of boys from schools situated in quiet areas on the spelling and arithmetic sub tests did not differ significantly from the boys studying in schools situated in noisy areas (Table No. llb & llc). Such finding suggest that boys suffer less from the surrounding noise. They are able to concentrate and respond well even in the disturbing environment. It could also be due to the fact that boys spend more time outside their homes hence they are more accustomed with noise and therefore, are not adversely affected by it. The evidence is further supported by Glass and Singer (1972), who found that once people get used to the noise, they perform equally well with loud noise as they do in quieter environments on a variety of tasks including simple arithmetic, matching sets of numbers, scrambled words and higher level arithmetic.

Moreover, not all people are affected by the same noise. Hence there are individual differences in sensitivity and reactions to noise. Furthermore, human being is an amazingly creature who can adapt to stress so that at first cause pain may after repeated exposure fail to do so. Thus, when an individual first moves in to a home next to the airport, the noise of the planes may keep him awake, but as he gets used to the noise he can easily sleep through it. This process of adaptation is called habituation (Harris, 1943).

Another significant pattern, which was observed in the results was that both the groups (studying in noisy and quiet areas) obtained relatively low scores on arithmetic sub test. (Table lc, llc & lllc). It could be due to the fact that the arithmetic problems generally demand more attention, concentration and reasoning ability. Time limit could be another factor as the arithmetic sub test was the only subtest that was limited to 10 minutes which could be a source of tension. However this factor did not seem to affect the performance of schools in quiet areas who obtained higher scores where as the boys did seem to suffer.

The results are also evident from the graphs No. a, b, c & d showing differences in performance in noisy and quiet areas. The effect of noise so far observed are correctional in nature.

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# EFFECTIVENESS OF TOKEN ECONOMY IN REHABILITATION OF MENTALLY RETARDED

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## ABSTRACT

To determine the effectiveness of token economy in rehabilitation of mentally retarded children, two cases were studied. A Basic Concept Scale was constructed to impart some elementary knowledge to retarded children. The scale consisted of VII main categories of therapeutically desirable behavior: color naming, object naming, space and time orientation (directions & days of week), general orientation (house, rooms), general information (names of teachers and class-fellows), naming body parts, and naming facial parts. The study consisted of three phases: baseline, association and therapeutic. In the baseline phase, the knowledge of concepts included in the scale was assessed for each subject. In association phase, subjects were made familiar with the value of tokens, exchangeable for commissary items of their choice. The therapeutic phase was consisted of total 24 one-hour sessions for each subject. The achievement of tokens was made contingent upon the learning of scale items. The results indicated that the token economy, as a behavior modification technique, can be used effectively with mentally subnormal children to teach some useful knowledge and also to promote general awareness necessary for adaptive functioning.

## INTRODUCTION

The disabled children of the world constitute the least represented member of the human race in any forms of the world. The disabled child, particularly the mentally retarded, has been wandering around the world throughout the history, disowned by parents, looked down upon the society and exploited by the criminals. Over the past few decades, however, there is a growing interest in the mental and physical rehabilitation of the mentally below-normal, and the treatment for the skills needed by people with mental retardation relies on the many behavioral innovations. Although these interventions do not erase the mental retardation, these programs do produce desired gains in the targeted behavior problems, and these gains contribute to a better life for the afflicted ones. The behavioral programs, especially operant conditioning, have not only been used to reduce inappropriate and self-injurious behavior (Gorman-Smith & Matson, 1985), but also have been employed to teach retarded clients particular skills for more adaptive functioning (Reid et al., 1991). Behavioral programs for teaching specific behavior follow the general pattern of "task analysis", in which the desired behavior or skill is broken down into its component parts, and the performance on each step is encouraged by praise and by providing access to objects or activities the client desired.

Among several of behavior modification strategies, token economies have been implemented in a variety of settings, i.e., classrooms, state hospitals, prisons, sheltered workshops, education and with a variety of populations including normal and disturbed. With the mentally retarded clients, the token economy interventions, emphasising the contingent application of rewards, have been especially and effectively employed to teach communication, self-help, and social and vocational skills (Kazdin, 1994). The contingent application of rewards works very effectively for even clients with severe mental disabilities. Reid and associates (1991) have reported the usefulness of behavioral interventions for teaching basic self-care skills such as dressing, bathing, feeding and toileting to severely retarded. The superiority of token economy over other behavior modification techniques for the rehabilitation of mentally sub-normal children is presumably due to the fact that the mentally handicapped children are usually unresponsive to ordinary social reinforcers like verbal praise, smile, affection and approval. In such cases, the most primitive reinforcement – food – proves to be quite successful as an exchange to acquired tokens. In a more recent study, Matson and colleagues (1998) reported that edible reinforcement and background feedback were more effective than modeling in teaching functional independent living skills to 22 severely and profoundly retarded residents from a large developmental centre in Central Louisiana.

The mentally sub-normal children being the "special children" require the specialized techniques for teaching and training. In developed countries, many modern interventions are employed to equip the afflicted ones with basic skills and behaviors, necessary for the most rudimentary of adjustments to their social environment. However, the situation is not very satisfactory in Pakistan, where the limited number of institutions for mentally retarded, definitely not sufficient to fulfill the total needs, do not provide the appropriate psychological environment. Although each institution usually has one psychologist, the majorities of the other staff members are untrained and are not only ignorant of retarded children's basic needs but also are unaware of psychological interventions. Usually in these institutions the retarded children are treated like normal children, and when they do not respond to "ordinary" teaching, it is assumed that they are unable to learn. Consequently, no change or improvement is found in their intellectual capacities and some of them even get worse. It was discovered, during one visit to one of these institutions, that some children were even ignorant of their own environment, and they did not know the names of the things of their daily use. Following that visit, a study was planned with an aim to teach the retardates such basic and elementary knowledge which would help them in being more adjusted to their natural environment.

## METHOD

### *Sample*

The study was conducted in a residential rehabilitation centre for mentally retarded children. Two subjects out of a total of twenty were selected from the institution. A single-subject design was adopted to study and treat the subjects intensively. Hence, the psychological intervention was applied to each subject individually. The reason for such a small sample was that the institution comprised of a very heterogeneous population with varying degrees of retardation, residential period and age which made it difficult to match the subjects on the relevant variables. Moreover, only those subjects had to be included in the study, who were staying for 24 hours in the institution (for the purpose of having similar environmental experiences), and there were only 12 of such students at the time of the study. The remaining 8 were going daily to attend a day-care centre. Moreover, the subjects were also required to be matched on age, hospitalization period and severity of retardation. Above all, they had to be matched on the basis of their limited knowledge of the basic concepts used in the study.

### *Material*

#### *1. Interview form*

In the initial selection process, all 12 children (who used to stay all 24 hours in the institution) were interviews and those subjects were selected who satisfied the following criteria of selection: (1) who had limited knowledge of basic concepts included in the scale; (2) who had not severe language problem. As a result of the interview, four children were selected.

#### *2. Seguin Form Board*

The Seguin Form Board test (Seguin, 1907) was used to match the level of retardation in the subjects. This is a very simple nonverbal test of intelligence in which the individual is requested to insert various shaped blocks into the corresponding recesses as quickly as possible. Four children, who were selected through interview, were administered the Seguin Form Board. One child completed the test very quickly, while the other three took nearly the same time to complete the test. Two out of these three children were selected for the intervention on the following basis: (1) who were more or less matched on age and residential period; (2) who, although suffering from a severe level of mental retardation, were having appropriate self-care skills, as reported by the psychologist of the institution (see Table 1).

#### *3. Basic Concept Scale (BCS)*

A scale was specially constructed to impart some basic and elementary knowledge to the subjects. A special care was taken in the selection of the items of behavior as only those activities were included in the scales which were assumed to equip the subjects with an understanding of their natural environment and of which they were completely ignorant. The scale consisted of 7 main categories of therapeutically desirable behavior: color naming, object naming, space and time orientation, general orientation, general information, naming body parts and naming facial parts; each category had four items. Four of the seven categories were further divided into sub-categories: object naming was divided into naming different toys, material used at the dining table and naming things for personal grooming, space and time orientation was further divided into naming positions and days of the week; general orientation was divided into house and room orientation; general information was sub-divided into names of the teachers and of the class-follows. Altogether, they all made 12 categories.

### *Procedure*

The study was divided into three main phases:

### *Baseline phase: Determining the weightage of the reinforcers*

Baseline behavior on the Basic Concept Scale (BCS) was recorded for each subject during 2 one-hour sessions. The subjects' four preferences regarding back-up food reinforcers were determined; both subjects selected bread with jam, biscuit, toffee and saunf supari as the first, second, third and fourth choices respectively. Considering their preferences, weightage of back-up reinforcers was determined; to get a piece of bread with jam, the child had to achieve 4 tokens; biscuit was accessible for 3 tokens, and so on. The numbers of tokens were made directly proportional to the number of concepts learned; one token was made contingent upon learning of one item in each category. Similarly, four tokens could be achieved by learning of IV items in a category.

### *Association Phase*

After determining the weightage of 4 back-up reinforcers, association phase was initiated. In that phase, subjects were made familiar with the value of tokens and the achievement of tokens was made contingent on the learning of those items which were not included in the BCS. After 6 one-hour sessions, accomplished over 2 weeks, both subjects became very familiar with tokens and their value.

### *Therapeutic Phase*

In the therapeutic sessions, both subjects were dealt with individually. The teaching phase consisted of total 24 one-hour sessions for each subject, extended over 2 months. Throughout the therapeutic phase, each subject participated in one-hour experimental session for three times a week.

As there were total of 12 categories (including main and sub-categories), the scale was split three parts and 4 categories were taught in each on-hour session to each subject. Accordingly, the whole scale was completed in III sessions. This implies that each category was repeated 8 times for reach subject. In the teaching session, each subject was told a particular concept of one category from the BCS, e.g., color naming and was instructed to remember it. Afterwards, the child was asked to reproduce the name of the concept; the successful reproduction was immediately rewarded with one token, exchangeable for saunf separi by the psychologist of the institution sitting in the adjoining room. Similarly, the subject was taught 2 concepts from the same category and was awarded with 2 tokens on remembering the concept, exchangeable for toffee, and so on. The subjects were allotted a score of 4 upon the achievement of one token, and the maximum score a subject could obtain on remembering all four items on a category was 16. In the ending sessions, as the subjects were learning rapidly and were achieving many tokens, some of the reinforcements were delayed until the evening of the next day.

The significance of the difference between pre- and post-treatment on all categories of the BCS was calculated by matched sample / test. The results were interpreted collectively for both subjects.

## RESULTS

**Table – I**
**Characteristics of the subjects**

| Subject | Age (years) | Hospitalis -ation period (years) | Socio-econom ic status | Self-care skills | Time taken in completion of Seguin Form Board Test | Level of retarda -tion |
|---|---|---|---|---|---|---|
| 1 | 17 | 2 | Low | Adequate | 10 minutes | Severe |
| 2 | 15 | 3 | Middle | Adequate | 8 minutes | Severe |

**Table – II**

**Difference between pre- post-therapeutic sessions on categories of Basic Concept Scale**

| Categories | Pre-therapeutic score Subject 1 | Pre-therapeutic score Subject 2 | Post-therapeutic score Subject 1 | Post-therapeutic score Subject 2 | |
|---|---|---|---|---|---|
| Color naming | 0 | 0 | 68 | 76 | 18.00* |
| Object naming | | | | | |
| *a. Naming toys* | 0 | 0 | 88 | 100 | 15.67* |
| *b. Naming things used at dining table* | 4 | 4 | 84 | 92 | 20.95* |
| *c. Material for personal grooming* | 4 | 4 | 100 | 108 | 25.00* |
| Space & time orientation | | | | | |
| *a. Positions* | 0 | 0 | 48 | 28 | 3.79 |
| *b. Days of week* | 0 | 0 | 32 | 20 | 4.33 |
| General orientation | | | | | |
| *a. House orientation* | 0 | 0 | 72 | 80 | 19.00* |
| *b. Room orientation* | 0 | 4 | 72 | 84 | 19.00* |
| General information | | | | | |
| *a. Names of teachers* | 0 | 0 | 64 | 68 | 33.00** |
| *b. Names of class-fellows* | 0 | 0 | 72 | 84 | 13.00* |
| Naming body parts | 0 | 4 | 76 | 88 | 13.29* |
| Naming facial parts | 0 | 0 | 84 | 92 | 22.00* |

* $P \leq 0.05$; ** $P \leq 0.02$

## DISCUSSION

The results in Table II, indicated that the difference between pre- and post-therapeutic sessions was significant at color naming, object naming, house orientation, and room orientation, general information, naming body parts and naming facial parts. However, the same difference was not significant at space and time orientation which indicated that token economy is not an effective technique for teaching of such concepts. The higher post-therapeutic score of the subject 2 on majority of the categories of the BCS was consistent with his comparatively better pre-therapeutic performance.

The findings of the present investigation are in agreement with previously conducted studies (Reid et al., 1991; Matson Coe, 1992; Vollmer & Iwata, 1992; Kazdin, 1994; Matson et al., 1998) in indicating that token economy with the presentation of the reinforcers contingent on the behavior in question can be effectively employed with mentally retarded children. The results suggested that token economy can be used to impart social skills and self-care abilities, which may be lacking among those with severe mental deficits. Individuals who are able to deal with their environment, for example, using toilet correctly, feeding and dressing themselves, can get along easier in our world than those who can not. Although the current research focused on the acquisition of some basic knowledge, the same techniques can also be used effectively to learn other adaptive and appropriate behaviors.

The findings of the current study are consistent with previous in indicating that token economy is an effective behavior modification technique for the teachings of mentally sub-normal children. The results suggest that token economy with the attraction of most primitive reinforcement of food works quite effectively for children with low intellectual abilities, and also that it can be employed to shape the behavior in the desirable direction. However, token economy did not prove to be effective in the learning of concepts related with space and time orientation. This implies that token economy was only effective in teaching of concepts, which could be associated with same material and concrete objects. For example, color naming was associated with colored blocks; names of teachers and institution-fellows were associated with people, and so on. Although directions (right, left, front, back) were associated with subjects themselves and with different views of the room, it did not prove to be effective. Similarly, days of weeks were associated with activity days and picnic day, but the results were not encouraging. May be the learning of abstracts in the case of mentally sub-normal requires some use of multiple strategies.

Although token economy did not prove to be an effective strategy for teaching space and time orientation to mentally retarded subjects, it does not seem to be plausible to draw unequivocal conclusions on the basis of a single-subject design study. Moreover, the subjects used in this study were severely retarded and they due to their limited intellectual abilities may not be able to learn abstract concepts. The severely and profoundly retarded child has been placed in sensorimotor stage of child development (up to the age of 2 years), when the child does not have nay abstract or logical thinking and when she has not yet developed a proper concept of time (yesterday, today, tomorrow, week, month and year).

One problem associated with single-subject design is that the difference between pre- and post-intervention can be attributed to maturation or practice effect. However, this does not seem to be a confounding variable in the case of present investigation as the material used in association period had nothing to do with the items used in original scale. Moreover, both subjects used to stay all day in the institution; hence they did not have a chance to learn the same behavior without the implementation of the intervention. It was also made sure that the subjects did not go to their home during the study period. Another confounding variable which could effect the results is that the researcher might have unconsciously emitted some verbal or non-verbal behavior like praise and smile. The possibility, however, that the social reinforcement as well as the attention the subjects were receiving during the study might have contributed or at least added to the significant difference between pre- and post-therapeutic sessions on many of the categories of BCS can not be ruled out. To keep out the effect of social reinforcement, future studies should also include a separate group of subjects who are only socially reinforced.

The findings of the current investigation indicate that token economy can be effectively employed in the rehabilitation of mentally below-average children. The results demonstrate that the contingent reinforcements can even prove useful in the case of severely retarded clients. This knowledge can be utilized in teaching such elementary knowledge which will enhance their awareness of the environment as well as of themselves and will also facilitate them in interpersonal communication. On the basis of the current findings, the uses of token interventions are strongly recommended in residential and day-care institutions of mentally handicap. However, his study should be carefully interpreted as the single-subject designs require both replication of procedures and results.

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# DEPRESSION IN CAREGIVER-SPOUSES OF THE CANCER PATIENTS

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**ABSTRACT**

The present research investigated manifestation of depression in caregiver-spouses of hospitalized cancer patients. A sample of 80 caregiver-spouses of cancer patients was selected by contacting the Oncology units of six hospitals of Lahore, Rawalpindi and Islamabad. The age range of caregiver-spouses was 17-68 years. Beck Depression Inventory (BDI- Urdu version) was administered to determine the degree of depression expressed by the caregiver-spouses of cancer patient. An interview schedule was devised by the researcher to determine the psychosocial and economic problems like household problems, financial problems, degree of hopelessness/helplessness, faith in spiritual healing and their interpersonal relationships. The results ($F = 17.37$; $df = 1.78$; $p < .01$) indicate that female caregiver-spouses manifested more depression ($\overline{X} = 28.72$) when their male partner is the victim than the male caregiver-spouses ($\overline{X} = 17.2$). Moreover, there is significant difference between the male and the female caregiver-spouses on degree of hopelessness/helplessness ($F = 20.48$; $df = 1.78$; $p < .01$) and faith in spiritual healing ($F = 7.25$; $df = 1.78$; $p < 0.1$) which indicates that female caregiver-spouses would feel more hopeless/helpless when their male partners are afflicted with cancer and more inclined to seek for spiritual help.

## INTRODUCTION

Cancer may not be the common cause of death, occurring much less frequently than heart disease, but it has the reputation of being usually a progressive fatal condition for which no decisive treatment has been discovered so far. Furthermore, the fatal nature of some types of cancer makes it the most threatening patient and the caregiving family members.

In fact, any type of illness involves two individuals - the patient and the caregiver. The medical definition of patient is as of a single organism; the individual with the physical signs and symptoms of disease. One can assume that most patients live in some kind of family system and that vast majority of cancer patients have a spouse to look after them during this critical phase of their life. As cancer represents a major health problem, it causes a lot of emotional, psychological and social problems – both for the patient as well as for the caregiver-spouses.

When someone is aware that his/her spouse is going to die due to fatal illness, he/she is likely to have feelings of a shock, denial, helplessness, loneliness, confusion and numbness. It has been observed that spouses of cancer patients experience many economic, social and emotional problems which may lead to psychological distress. As a result, spouses of patients may view circumstances nothing is going to change the situation and; hence, feel helpless state of helplessness/hopelessness may become a proximal cause of the various symptoms of depression. Young, Fogg, Scheftner, Fawcett, Akiskal and Maser (1996) found that hopelessness may be important predictor of subsequent depression, with higher baseline hopelessness being a significant risk factor. These researchers also found that higher baseline hopelessness was associated with female gender and the belief that stressful events were causally related to the development of the initial study episodes of depression. Therefore, it can be assumed that the spouses of the cancer patients would manifest a high degree of depression as the deleterious effects of the disease increase in the victim.

Markus and Kitayama (1991), Sampson (1989) and Triandis (1989) maintained that women are most likely than men to have what is called collectivist, ensembled or connected schema for the self. In such a self-schema, relations with other people, especially valued and important others are crucial elements and, thus, others are represented as the part of the self, once included with the self. Hence, it may be hypothesized that female, as being caregiver of her husband with cancer, may experience a high degree of depression. In contrast, men are relatively more likely to develop what is called an individualist, independent or autonomous schema for the self. In this type of schema others are represented not as a part of the self, but rather as distinct from it. Therefore, it can be argued that male caregiver-spouses would manifest a relatively lower degree of depression as compared to female caregivers.

It has been observed that in Pakistani society most of the emotional support is provided by women, because from childhood on, women, moral sense emphasizes caring for others through socialization process. Therefore, women become attuned to the needs of others. In her family roles, a women has to serve the needs of her husband, children and other kinfolk. However, in a patriarchal society like ours, it can be assumed that men lack training in the caring and psychologically supportive function and; hence, manifest low degree of depression than females. Miller (1986) contended that women, because of their relatively powerless position in society, must be constantly attuned to and responsive to others, especially, to the dominant others often the male providers who control their fate.

Unfortunately, by the time most cancers are diagnosed in Pakistan, the most radical approach to control is the removal of the afflicted area or region, because otherwise it will rapidly invade the rest of the body, particularly in case of breast cancer, the best prevention is to remove the breast. This removal of an important part may give rise to feelings of depression in patient as well as in spouse which often affect the relationship adversely.

For most caregivers, the strain of caregiving is severs and chronic due to long duration of disease like cancer and the increasing assistance daily activities required by the spouses over the course of illness. Often, cancer is viewed as a major stressor by the caregiver-spouses which may activate in them the negative cognitive set, consisting of pessimistic view of the world, self and the future (Beck, 1976). This may result in an abnormally extreme negative affect (usually, depressive state) because the spouses of cancer patients may picture the future as bleak.

Cancer is usually a fatal disease. Due to the nature of disease it requires life-time treatment. When one partner is afflicted with cancer, the other one perceives it as being unable to control the event and, hence, feels helpless. This state of helplessness may be a significant cause of depression among spouses of the cancer patients. The treatment of cancer is also very costly and it requires a lot of money. In a country like Pakistan, where average per capita income is very low and any governmental and organizational support for medical treatment, particularly, for cancer, is also very minimal, the financial problems often aggravate feelings of helplessness and depression, both in the patients and their caregiver-spouses.

The dramatic physical deterioration in individuals afflicted with cancer, often, multiplies the psychosocial problems. When someone's spouse is diagnosed with cancer, the questions are the same: will he/she die, or can the disease be treated, could the disease have been prevented? It has been observed that the diagnosis of a malignancy in one spouse imposes stress on the other.

Blood, Simpson, Dineen, Mary, Kauffman and Susan (1994) described the caregiver's strain and burden of spouses afflicted with laryngectomics. They found that the strain and burden of caregiving decreased as the time from the diagnosis of cancer increased. Male caregivers reported less stain and burden independent of other current stressors in their lives.

It appears that the spouses of cancer patients, particularly, in Pakistani society, expect that there is no decisive treatment or cure for cancer, because, due to lack of sophisticated medical facilities, the diagnosis of cancer is usually so much that, often leads to death. Hence, the caregiver-spouses of Pakistani cancer patients are bound to experience an overwhelming sense of hopelessness and depression.

## METHOD

The present research follows an ex-post facto research design, Dunham (1988) suggests that the label ex-post facto refers to the selection of subjects who have already been exposed to particular treatments or who already exhibit particular characteristics such as the diagnosis of the cancer in the present research. The researchers use this design for suggesting how a significant event in the past might have influenced people. A sample of 80 caregiver-spouses, experiencing the stress of a spouse afflicted by cancer was selected from six different hospitals of Lahore, Rawalpindi and Islamabad.

The age range was 17-67 years. A comparative group sampling strategy was used in which one group (caregiver-spouses of hospitalized female cancer patients) was compared with another group (caregiver-spouses of the hospitalized male cancer patients).

In this research manifestation of depression in caregiver-spouses of hospitalized cancer patients was measured by using Beck Depression Inventory (Urdu version). Moreover, a Personal History Questionnaire (PHQ) and in Interview Schedule was also devised by the researchers in which questions were included about those psychosocial and financial stressors, which were supposed to exacerbate respondent's state of depression. Each subject was administered BDI and PHQ, individually.

## RESULTS

**Table I**
**One-Way Analysis of Variance for Depression in Male and female Caregiver-Spouses of Cancer Patients**

| Source | Degree of Freedom | Sum of Squares | Mean Square | F | α |
|---|---|---|---|---|---|
| Between sum of squares | 1 | 2656.51 | 2656.51 | **17.37 | < .01 |
| Within sum of squares | 78 | 11926.37 | 152.90 | | |

$F(1, 78) = 17.37$, $^{**}p < .01$

**Table II**
**One-Way Analysis of Variance for Household Problems in Male and Female Caregiver-Spouses Patients**

| Source | Degree of Freedom | Sum of Squares | Mean Squares | F | α |
|---|---|---|---|---|---|
| Between sum of squares | 1 | 7.2 | 7.2 | 2.32 | > .01 |
| Within sum of squares | 78 | 242 | 3.10 | | |

$F(1, 78) = 2.32, p > .01$

**Table III**
**One-Way Analysis of Variance of Financial Problems in Male and Female Caregiver-Spouses of Cancer Patients**

| Source | Degree of Freedom | Sum of Squares | Mean Squares | F | α |
|---|---|---|---|---|---|
| Between sum of squares | 1 | 0.312 | 0.312 | 0.19 | > .01 |
| Within sum of squares | 78 | 126.07 | 1.616 | | |

$F(1, 78) = 0.19, p > .01$

**Table IV**
**One-Way Analysis of Variance for Degree of Hopelessness/ Helplessness in Male and Female Caregiver-Spouses of Cancer Patients**

| Source | Degree of Freedom | Sum of Squares | Mean Squares | F | α |
|---|---|---|---|---|---|
| Between sum of squares | 1 | 18.05 | 18.05 | $^{**}$20.48 | < .01 |
| Within sum of squares | 78 | 68.75 | 0.88 | | |

$F = (1, 78) = 20.48, ^{**}p < .01$

**Table V**
**One-Way Analysis of Variance for Faith in Spiritual Healing in Male and Female Caregiver-Spouses of Cancer Patients**

| Source | Degree of Freedom | Sum of Squares | Mean Squares | F | α |
|---|---|---|---|---|---|
| Between sum of squares | 1 | 17.112 | 17.112 | **7.25 | < .01 |
| Within sum of squares | 78 | 184.07 | 2.36 | | |

$F = (1, 78) = 7.25$, $^{**}p < .01$

**Table VI**
**Percentages of Psychosocial and Economic Problems Faced by Male and Female Caregiver-Spouses of Cancer Patients**

| Type of Problems | Male Caregivers | | Female Caregivers | |
|---|---|---|---|---|
| | Frequency | Percentage | Frequency | Percentage |
| Costly Treatment | 21 | 52.5% | 19 | 47.5% |
| Less Income | 12 | 30.0% | 18 | 45.0% |
| No Government Help | 35 | 87.5% | 24 | 60.0% |
| Dissatisfaction With Treatment | 3 | 7.5% | 4 | 10.0% |
| No Sharing Due to Illness | 3 | 7.5% | 10 | 25.0% |
| No Sexual Relation-ships Due to Illness | 14 | 35.0% | 22 | ·55.0% |
| No interest in Sexual Activity | 9 | 22.5% | 11 | 27.5% |

## DISCUSSION

The results given in Table I show that there is a significant difference in the degree of depression manifested by the male and the female caregiver-spouses of the hospitalized cancer patients as indicated by F ratio ($F = 17.37$, $df = 1, 78$, $p < .01$).

The results given in Table II indicate no difference in household problems in both groups revealed that both male and female caregiver-spouses of hospitalized cancer patients were experiencing same kind of problems.

The results in Table III also show no difference in both groups. Hence, it may be concluded that both male and female caregiver-spouses of hospitalized cancer patients have almost financial problems.

In Table IV the analysis of variance indicates significant difference in degree of hopelessness/helplessness ($F = 20.48$, $df = 1. 78$, $p < .01$). Hence, it may be stated that female caregiver-spouses express more feelings of hopelessness or helplessness when their male partners are the victim rather than the male caregiver-spouses of the hospitalized cancer patients.

The results given in Table V indicate significant difference for faith in spiritual healing. Therefore, it may be concluded that female caregiver-spouses have more faith in spiritual healing than the male caregiver-spouses.

The results in Table VI show no significant difference in interpersonal relationships in both groups. Therefore, it appears that both groups were experiencing same kind of problems due to the chronic illness of their spouses.

Interesting enough, the female caregiver-spouses scored higher than male caregiver-spouses on the degree of hopelessness/helplessness ($F = 20.48$, $df = 1, 78$, $p < .01$) and faith in spiritual healing ($F = 7.25$, $df = 1, 78$, $p < .01$). One possibility may be that the Pakistani female caregiver-spouses have multiple responsibilities, such as taking care of household and children along with caring for a spouse suffering from a life-threatening disease like cancer. Therefore, they might have experienced more depression and an overwhelming state of hopelessness/helplessness. A second explanation may be in the context of their sociocultural and religious value system which promotes females' physical and financial dependency on males. Probably, because the male partners are considered "the providers" for the family network. As a result, when the male partner is the victim of or helpless with multiple financial, emotional and interpersonal stressors. Furthermore, these female caregiver-spouses would be more inclined to seek for spiritual help in this highly traditional and religious society, perhaps, to fill in the gap created by their ill spouses.

Table VI indicates that 50% of the caregiver-spouses reported that due to costly treatment of cancer, they faced many financial problems. As cancer requires costly treatment, these financial problems might have exacerbate their feelings of depression. 16% caregiver-spouses had no mutual sharing and 45% showed no interest in sexual relationships, probably, due to their spouses illness or they were too inhibited to respond to such questioning. Hence, the current research data suggest that female caregiver-spouses manifested more depression and experienced more problems in sexual relationships as compared to the male caregiver-spouses.

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# A PRELIMINARY REPORT ON DEVELOPMENT OF CHANGE SEEKING BEHAVIOR SCALE

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## ABSTRACT

This paper concerns the preliminary report on the Psychometric ingredients of Change Seeking Behavior Scale (CSBS). Two hundred university male and female students were taken as a sample. Item Total Correlation Coefficient was worked out for each item. Cronbach's (1951) Coefficient Alpha was found at .57% level suggesting that the eighteen items (see appendix) claiming to be a scale of change seeking behavior are significantly homogeneous and consistent.

## INTRODUCTION

Doing routine work gradually loses attraction. Going to the office handling the same old tasks, dealing with the same people, handling machinery, cooking, baking bread etc sooner or later makes life boring. The most luxurious of life styles becomes boring. Consequently people perceiving themselves in a routine and boring life pattern feel like seeking change. Making new friends, going to unusual places, doing something in a different way, etc are a few examples of change seeking strategies people feel like adopting in order to avoid the monotony of everyday life. To define the concept of change seeking behavior, it may be stated that doing the same thing in a different way is change: a step towards avoiding the taxing effect of boring life routine resulting from feeling of doing the same thing in the same way each day. The concept of change seeking can be compared to "sensation seeking: as described by Zuckerman (1979).

Zuckerman first described sensation seeking as a personality trait. Sensation seeking is a generalized preference for high or low levels of sensory stimulation. People who are high in sensation seeking prefer a high level of stimulation. They are always looking for new and exciting experiences whereas people who are low in sensation seeking choose tranquility over excitement.

Zuckerman (1979); Zuckerman, Buschsbaum and Murphy, (1980) found that high sensation seekers display the following tendencies different from low sensation seekers.

1. They are more likely to engage in activities that may involve a physical risk e.g.: mountain climbing, skydiving, scuba diving etc.

2. They are more willing to volunteer for unusual experiments e.g. meditation sensitivity groups etc.

3. They might relish extensive travel, wild parties and unusual friends. Studies by Lesnik, Oberstein and Cohen (1984) show that partners in intimate relationship tend to be fairly similar in sensation seeking. Compatibility on this trait seems to be a predictor of marital adjustment (Fisher, Zuckerman and Neeb, 1981).

The present paper is a preliminary report on the Psychometric Ingredients of Change Seeking Behavior Scale (CSBS). The scale purports to measure the extent of frequency to which one feels like changing circumstances with a view to avoid the taxing effects of boredom.

### *Development of the Scale*

Items were phrased on the definition of change seeking behavior. Initially a list of fill in the blank statements were phrased with the instructions to the person taking the scale to choose one frequency of feeling (out of four frequencies) for each statement which is the most indicative of his feeling. The endorsed statements are rated on a four point scale i.e. marks of 4, 3, 2 and 1 are assigned to always, often, sometimes and never respectively. Logically higher the score greater the frequency of feeling of change.

### *Sample and Procedure*

100 university male students and 100 female students participated in the initial stage of the scale construction. Male students were 20 to 24 years of age and female students were 20 to 23 years of age. Analysis of Variance of age shows no significant difference in age range between them, $F(1, 198), = 0.35, P > .05$. Since they were all grownups they can be described as men and women.

## RESULTS

**Item-Total correlation coefficient of each item**
**Item-Total correlation coefficient (N=200)**

| Item | r | P |
|---|---|---|
| 1. | 0.298 | <. 01 |
| 2. | 0.205 | <. 01 |
| 3. | 0.307 | <. 01 |
| 4. | 0.287 | <. 01 |
| 5. | 0.281 | <. 01 |
| 6. | 0.300 | <. 01 |
| 7. | 0.295 | <. 01 |
| 8. | 0.311 | <. 01 |
| 9. | 0.288 | <. 01 |
| 10. | 0.308 | <. 01 |
| 11. | 0.284 | <. 01 |
| 12. | 0.290 | <. 01 |
| 13. | 0.314 | <. 01 |
| 14. | 0.311 | <. 01 |
| 15. | 0.325 | <. 01 |
| 16. | 0.314 | <. 01 |
| 17. | 0.303 | <. 01 |
| 18. | 0.209 | <. 01 |

## DISCUSSION

The 0.01 or less level of significance was taken to be the criterion of selection of items. 18 items met the criterion and as such they were viewed as highly related to each other. Meaning thereby that all the items were conceptually the same. As such, they were all selected for the purpose of developing a scale tending to measure the change-seeking behavior. Other items were dropped from the list.

Cronbach's (1951) coefficient alpha was found at 0.57% level, which suggests that the scale is internally consistent. According to Nunnaly (1967) coefficient alpha above 0.50 is more than sufficient for research purposes. Moreover the mean inter item correlation was found to be significant (0.291 $p<.01$) which may be interpreted to mean that all the items making up the change seeking behavior scale are homogeneous and may be taken to be a reliable measure of change seeking behavior.

Further research can be conducted to validate the scale. Scales like the Zuckerman Sensation seeking scale can be used for this purpose.

In summary the items of the scale purporting to measure Change seeking behavior are significantly similar to each other as well as internally consistent.

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## APPENDIX
## CSBS SCALE

NAME________________________ AGE______________ SEX _______

CLASS/OCCUPATION____________MARITAL STATUS ___________

Given below is a fill in the blank questionnaire. Please fill in each black with the appropriate frequency of your feelings. The following are four frequencies of feelings:

Often

Sometimes

Never

Chose one for each blank

1. I _____________ feel like making new friends
2. I _____________ feel like going to unusual places
3. I _____________ feel like doing the same thing in a different way at home/ workplace.
4. I _____________ feel like running away from the monotony of everyday life.
5. I _____________ feel like changing the fixed life pattern.
6. I _____________ feel like losing attraction in intimate friend/spouse.
7. I _____________ feel like watching movies based on unusual themes.
8. I _____________ feel like leaving the dull atmosphere of the home/ workplace.
9. I _____________ feel like refusing to do things in a fixed way.
10. I _____________ feel like taking no interest in sex.
11. I _____________ feel like bringing about change in the boring life routine.
12. I _____________ feel like going anywhere away from home.
13. I _____________ feel like getting away from the same familiar faces.
14. I _____________ feel like same thing in the same way.
15. I _____________ feel like spending holiday somewhere outside home.
16. I _____________ feel like introduction change in the routine way of doing things at home/ workplace.
17. I _____________ feel like taking no interest in eating daily food items.
18. I _____________ feel like passing through unfamiliar streets.