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DEVELOPMENT OF AN INDIGENOUS SCALE FOR EMOTIONAL INTELLIGENCE BASED ON GOLEMAN'S MODEL: A PERSPECTIVE OF PAKISTANI CLINICAL PSYCHOLOGISTS

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ABSTRACT

The present study aimed to develop an indigenous scale of emotional intelligence while following the theoretical rationale of Goleman's model (1995), which consists of five main domains: Self Awareness; Self Regulation; Motivation; Empathy and Social Skills with 19 sub-domains. To develop an item pool for the scale, the qualified clinical psychologists of Pakistan (N=220) were requested to formulate questions on different sub domains of Goleman's model. It was done through a mailed survey. 38% responses were received from the sample. The researcher listed all the elicited opinions and classified items in each scale separately, which was later scrutinized by the research team, which included the researcher, supervisor and the co supervisor. Duplications were deleted and some of them were modified according to their relevance to the respective domain. Furthermore, from a pool of 925 items which was received, a total of 321 items were finally scrutinized and classified in different sub domains of each scale. The title of each sub-domain was also given by the research team after critically examining the domain and it's contents. For construct validity of the scale, the already selected 321 items were sent to a panel of 'E' experts who had the practical experience of a minimum of 15 years in mental health profession, which included clinical psychologists who consented to participate as judges. They were asked to rate each item on a 1 to 5 point scale for it's relevance and suitability in each of the sub domains given by Goleman. The items which obtained a mean value of '3' were retained in the final scale.

INTRODUCTION

Emotional Intelligence (EI) and Emotional Quotient (EQ) were declared as 'new words' in 1995 by the American Dialect Society (Mayer, Caruso, & Salovey, 2000). The interest from intelligence to emotional intelligence started shifting with the publication of two articles in 1990 in academic Journals by Mayer, DiPaolo and Salovey; Salovey and Mayer. Both words gained an immense popularity through the publication of Goleman's best selling book in 1995 entitled 'Emotional Intelligence: Why EQ matters more than IQ'. Since the publication of the book, 'EI' has been a hotly debated topic and brought widespread attention to the concept all over the world.

Goleman defined emotional intelligence as the "abilities such as being able to motivate oneself and persist in the face of frustrations; to control impulses and delay gratification; to regulate one's moods and keep distress from swamping the ability to think; to empathize and to hope" (1995, p.36), and more recently, in 'Working with Emotional Intelligence', as "the capacity for recognizing our own feelings and those of others, for motivating ourselves, and for managing emotions well in ourselves and in our relationships" (1998, p. 317).

However, Mayer and his colleagues (Mayer & Salovey, 1997; Mayer, Caruso, & Salovey, 2000) defined EI as a set of abilities that facilitate the perception, expression, assimilation, understanding and regulation of emotions, so as to promote emotional and intellectual growth. Mayer and Salovey (1997) posited that EI comprises of four abilities: (1) the ability to perceive emotions in oneself and others, as well as in objects, art, and stories (perception of emotion), (2) the ability to generate emotions in order to use them in other mental processes (emotional facilitation of thought), (3) the ability to understand and reason about emotional information and how emotions combine and progress through relationship transitions (understanding emotions), and (4) the ability to be open to emotions and to moderate them in oneself and others (managing emotions).

In the light of above mentioned theoretical perspectives, two opposing views have emerged on the construct of emotional intelligence: One is that emotional intelligence is trait based and it includes almost everything related to success that is not measured by IQ (Bar-On, 1997; Goleman, 1995, 1998); and the other argues for a more restrictive view of emotional intelligence as ability based which includes the ability to perceive and understand emotional information (Mayer, Caruso, & Salovey, 2000).

Although, there is research conducted with ability based approach however there is more emphasis given by researchers on trait based approach of EI. Goleman described EI as being non cognitive in nature which includes personal traits as motivation, optimism, adaptability and warmth. Bar-On (1997) also endorsed the trait based approach of EI and has also suggested EI as a set of non- cognitive abilities, skills and competencies that influence the way individuals cope with demands and pressures.

Mayer, Caruso and Salovey (2000) suggested that EI has an influence on work related outcomes; job performance and interpersonal interactions; job interviews, etc. However, Goleman (1995; 1998) claimed that EI predicts both life and work success. He surmised that, because IQ is thought to account for about 20% of the variance in life success and EI is accounted for the remaining 80%. Goleman (1998) also claimed that, because EI affects almost every aspect of work life, employees who are high in EI are "star performers". Publishers of EI tests advocate the use of 'EI' tests for personnel selection, claiming that research has demonstrated a strong correlation between EI and job performance (Bar-On & Parker, 2000; & Schulze & Roberts, 2005).

Like Goleman Bar-On (1997) proposes five broad areas of skills or competencies and within each a more specific skill which contributes to success: (1) Intrapersonal Skills: Emotional self-Awareness, Assertiveness, Self-Regard, Self-Actualization, independence; (2) Intrapersonal Skills: Interpersonal Relationships, Social Responsibility, Empathy; (3) Adaptability: Problem Solving, Reality Testing, Flexibility; (4) Stress Management: Stress Tolerance, Impulse Control; and (5) General Mood: Happiness and Optimism. He developed an Emotional Quotient Inventory (EQ-i) (Bar-On, 1997) based on this model of non cognitive skills which has fifteen subscales.

On the other hand in 1998 Goleman in collaboration with Richard Boyatzis also developed a measuring instrument of EI called the Emotional Competence Inventory (ECI). ECI includes four domains: (1) Self Awareness Cluster: Emotional Self Awareness; Accurate Self Assessment and Self Confidence; (2) Self Management Cluster: Self Control, Trustworthiness, Conscientiousness, Adaptability, Achievement Orientation, Initiative; (3) Social Awareness Cluster: Empathy, Organizational Awareness and Service Orientation; and (4) Social Skills Cluster: Leadership; Communication; Influence; Change Catalyst; Conflict Management; Building Bonds; Team Work and Collaboration and Developing Others. There is 1 additional sub-domain from 'EI' construct of Goleman (1995), which is incorporated from Boyatzis's Self Assessment Questionnaire, making the scale more comprehensive. As the final scale of ECI includes both a priori frame work as well as empirical framework, however, Boyatzis, Goleman and Rhee (2000) suggested that the a priori clustering technique makes more sense – as it follows both the mental and theoretical model, in comparison to empirical clustering which is only on statistical calculations.

Similarly, an effort was made to develop an indigenous Emotional Intelligence Scale (EIS) in Pakistan following the theoretical model of Goleman (1995) with its five domains and using an a priori frame work of verification as suggested by Boyatzis, Goleman and Rhee (2000).

METHOD

Development of Emotional Intelligence Scale (EIS)

The EIS was developed in two phases.

Phase –I

Scale Construction Strategy

An indigenous EI Scale was devised by using the analytic approach of test construction. The analytical approach relies mostly on a theory to determine the selection of items, procedures and criteria for assessing individuals. Using this approach, items for the scale are selected which tap an aspect of the construct under consideration, which in the case is EI (Golden, Sawaiki & Franzen, 1984). The study has used the theoretical rationale of Goleman (1995) for measuring EI. The Goleman's theory covers five major domains which include Self Awareness, Self Regulation, Motivation, Empathy and Social Skills.

Sample

A mailed survey was conducted for item generation on a sample of 220 professional clinical psychologists from all the four provinces of Pakistan. For the opinion poll of the items, only those clinical psychologists were requested who were qualified from well-recognized institutes of Pakistan for the professional training of clinical psychology, which included Institute of Clinical Psychology, Karachi and Centre for Clinical Psychology, Lahore.

Procedure

Stage I. Initially, a mailed survey was conducted on clinical psychologists from all the four provinces of Pakistan. They were either working in hospitals or teaching Psychology at the post master's level. They were asked to generate items in the five domains of EI as given by Goleman (1995). After getting the postal addresses of qualified clinical psychologists from the two institutes of Clinical Psychology, one in Karachi and the other in Lahore, the researcher mailed letter to 220 clinical psychologists requesting them to formulate questions focusing on the five domains of emotional intelligence given by Goleman in 1995. The basic rationale of involving these professionals was to take their perspective about these five domains in an objective manner. The professionals were sent a comprehensive self explanatory letter regarding nature of their involvement, theoretical rationale of five domains as suggested by Goleman along with return prepaid envelopes. Initially they were given one month

duration to respond. Later, a reminder had to be sent along with another prepaid envelope to those who did not respond. They were again given one month time period to respond. After sending letters twice, the research team decided to not wait any longer. All items collected from 74 clinical psychologist for opinion poll were listed.

Stage II. In the second stage, a research team which included the researcher, co-supervisor and supervisor scrutinized each statement sent keeping in focus the five domains which included: Self Awareness; Self Regulation; Empathy; Motivation and Social Skills and 19 sub domains as given by Goleman. Although all the clinical psychologists were sent structured instructions to construct the items accordingly but it was noticed by the team members that there were discrepancies in construction of the items, so the responses sent by clinical psychologists were scrutinized thoroughly. Repetitive items were carefully examined / refined / deleted and many items were re-appropriated according to their relevance in each one of the five given domains and sub domains. The research team made modifications or edited where necessary in 30 meetings of 2 to 3 hours duration within 4 months. After this rigorous exercise, the sub-domains were named by the research team.

The final list of EIS has 319 items. It is a self reporting scale where a respondent is asked to rate his / her feelings and behaviours on a 1 to 5 Likert Scale. Where '1' reflects high level of disagreement, '2' disagreement of a moderate level, '3' neither disagree nor agree, '4' indicates agreement of a moderate level and '5' shows high level of agreement.

Phase –II

Sample

To determine the construct validity, eight qualified clinical psychologists were requested to rate each item of the final list of EIS on a 1 to 5 Likert Scale.

Procedure

The main task of the second phase was to determine the construct validity of the final scrutinized items through a priori framework. It was decided by the team members to send these items to a panel of judges who would have the practical experience of minimum of 15 years in mental health profession which included professional clinical psychologists who have their post master's training in the field of clinical psychology. After having a list of experts, requests were sent to each and explained the complete task required by them to judge and examine 321 items focusing on the Goleman's model. They were briefed that they are to rate each item on a 1 to 5 Likert Scale for it's suitability and relevance in each of the 5 domains and it's 19 sub-domains. Those who sent their approval to be a judge were sent the listed items and printed material on

Goleman's theory and a list of 5 domains and 19 sub-domains as a guideline. The judges were asked to give a rating of '1' to those items which were not at all related to the domain and the items which seemed to have high relevance with the domain was to be rated as '5'. In this manner, appropriateness in terms of relevance and suitability by the judges about each item across all the five domains was taken. The items which had an average rating of '3' and above were selected for the scale of EI. Ratings of judges were averaged, hence this whole process helped in determining the construct validity of EI.

RESULTS

Table 1
Total number of mailed letters and responses received in three mailed surveys (N=220)

Survey	No of letters sent to professionals	Response Rate	
		F	%
First Mailed Survey (First Letter)	220	18	8
Second Mailed Survey (First Reminder)	202	24	12
Third Mailed Survey (Second Reminder)	178	32	18

The results given in Table 1 indicate that in the response of first letter only 8% out of 220 clinical psychologists replied; in the second letter 12%, responses were received. However, after the third letter or second reminder response rate became upto 18%.

Table 2
Goleman's theoretical perspective, assigned name and total number of scrutinized items in each sub-domain of Self Awareness (Scale-I)

	Theoretical Perspective	Name of Sub Domain	No of Items
1	Knowing about the feelings which one is having at the moment	Feelings	20
2	Using one's own preferences to guide in decision making	Decision Making	15
3	Having a realistic assessment of one's own abilities	Realistic Self Appraisal	15
4	Well grounded sense of self-confidence	Realistic Self Confidence	23

The results given in Table 2 indicate that Scale-I: Self Awareness consists of four sub-domains with a total of 73 items. The first sub domain of Scale-I is named as Feelings has 20 items. Responses are coded on a 5 point Likert type scale. Six items are coded in reverse. Second sub-domain which is named Decision Making has 15 items, out of which 2 items are in reverse order. Third and fourth sub-domains: Realistic Self Appraisal and Realistic Self Confidence comprise of 15 and 23 items, respectively and 3 items are coded in reverse in the sub-domain of Realistic Self Confidence.

Table 3
Goleman's theoretical perspective, assigned name and total number of scrutinized items in each sub-domain of Self Regulation (Scale –II)

	Theoretical Perspective	Name of Sub Domain	No of Items
1	**Handling one's emotions so that they facilitate rather than interfere with the task at hand**	Emotional Regulations	22
2	**Being conscientious and delaying gratification to pursue goals**	Delaying Gratification	15
3	**Recovering well from emotional distress**	Emotional Recovery	18

The results given in Table 3 indicate that Scale-II: Self Regulation has three sub-domains: Emotional Regulations, Delaying Gratification and Emotional Recovery. It has a total of 55 items in its three sub domains: 22, 15 and 18 items, respectively. There are 6, 2 and 3 items are reversely coded.

Table 4
Goleman's theoretical perspective, assigned name and total number of scrutinized items in each sub-domain of Motivation (Scale –III)

	Theoretical Perspective	Name of Sub Domain	No of Items
1	**Using one's deepest preferences to move to guide towards one's goals**	Goal Directed Preferences	13
2	**Using one's deepest preferences to help in taking initiative**	Initiative Preferences	9
3	**Using one's deepest preferences and strive to improve**	Improvement Directed Strivings	18
4	**To persevere in the face of setbacks and frustrations**	Perseverance	27

The results given in Table 4 suggest that Scale-III: Motivation comprised of 67 items with four sub domains. First is named: Goal Directed Preferences with 13 items,

second is Initiative Preferences with 9; third is Improvement Directed Strivings with 18 and the last is Perseverance with 27 items. Reverse coding is only in 6 items of Perseverance.

Table 5
Goleman's theoretical perspective, assigned name and total number of scrutinized items in each sub-domain of Empathy (Scale-IV)

	Theoretical Perspective	Name of Sub Domain	No of Items
1	Sensing what other people are feeling	Being Considerate	9
2	Being able to take other's perspective	Awareness About Other's Perspective	21
3	Cultivation rapport with a broad diversity of the people	Generous Rapport Developing	19

The results given in Table 5 indicate that the Scale-IV: 'Empathy' is further sub divided into three sub domains which are named Being Considerate; Awareness About Other's Perspective and Generous Rapport Developing. The Empathy Scale has a total of 49 items with 9, 21 and 19 items in each of the three sub domains. There is only 1 item which is coded in reverse and that is in sub domain: Being Considerate.

Table 6
Goleman's theoretical perspective, assigned name and total number of scrutinized items in each sub-domain of Social Skills (Scale-V)

	Theoretical Perspective	Name of Sub Domain	No of Items
1	Handling emotions in social relationships well	Emotional Regulation in Relationships	12
2	Ability to read social situations and networks accurately	Perception of Social Networks	15
3	Ability to interact smoothly with other people	Congenial Relationships	15
4	Ability to use social skills to persuade and lead	Leadership Abilities	22
5	Ability to negotiate and settle disputes for cooperation and team work	Facilitative Communication	13

The results given in Table 6 indicate that 'Social Skills' being the fifth scale of EIS comprised of 77 items with five sub domains. The first sub-domain named: Emotional Regulation in Relationships has 12 items and 2 are in coded in reverse. The

second and third: Perception of Social Networks and Congenial Relationships, each has 15 items. The fourth: Leadership Abilities has 22 items and fifth: Facilitative Communication has 13 items.

Table 7
No of items in each domain according to obtained mean value (*M*) based on the ratings of experts

Scales						Rejected Items	Final Items
	M=1	*M*=2	*M*=3	*M*=4	*M*=5		
Scale-I	-	-	18	45	10	0	73
Scale-II	-	1	16	34	4	1	54
Scale-III	-	-	21	43	3	0	67
Scale-IV	-	-	15	31	3	0	49
Scale V	-	1	8	65	3	1	76
Total	-	2	78	218	23	2	319

The results given in Table 7 show that only 2 items were rejected due to a mean value of '2'. However, a total of 319 items were retained which obtained a mean value of '3' (n=78); '4' (n=218); and '5' (n=23), respectively.

DISCUSSION

The results given in Table 1 indicate that 220 clinical psychologists qualified from two institutes: Institute of Clinical Psychology, Karachi and Centre for Clinical Psychology, Lahore were contacted and were asked to generate items by following the theoretical rationale of Goleman (1995). Only 38% responses were received despite two reminders. Social researchers: Shaughnessy, Zechmeister and Zechmeister (2003); Nachmias and Nachmais (1992) cited that if total responses received in a mailed survey are 30% and 30-40%, respectively then it is acceptable for analysis. As the given task was demanding, similarly the response rate of the present study is consistent with percentage given by the social researchers.

The results given in Table 2 indicate that Scale-I: Self Awareness of EIS consists of four sub domains, whereas in comparison, in ECI, the Self Awareness Scale has only three sub-domains. The reason may be because the development procedures of both the Scales are different. However, despite two sub-domains of EIS which includes Realistic Self Appraisal and Realistic Self Confidence seem similar to ECI's two sub-domains: Accurate Self Assessment and Self Confidence. The nomenclature given in the

two scales is different, however, the underlying construct seems to be similar. Furthermore, there are differences in two sub-domains of EIS which include Feelings and Decision Making in comparison to one sub-domain of ECI, Emotional Self Awareness. It can be argued that it could be due to cultural differences in the two societies –Pakistan and the U.S.– where the two instruments have been developed. This variation probably may be due to cultural differences and / or the methodological differences in the construction of the two instruments. It may be that the Clinical Psychologists in Pakistan who were asked to formulate items for EIS used items which projected their collectivistic approach reflecting strong family bonds, whereas, in the U.S. culture, focus is more on an individualistic approach where an individual pays more attention to the self.

The results given in Table 3 and 4 relate to Scale-II: Self Regulation and Scale-III: Motivation of EIS. Self Regulation is further divided into three sub-domains: Emotional Regulations; Delaying Gratification; Emotional Recovery and Motivation has four sub-domains: Goal Directed Preferences; Initiative Preferences; Improvement Directed Strivings and Perseverance. The comparison between the two instruments show that since ECI is based on both the theoretical and an empirical clustering model, therefore, two domains: Self Regulation and Self Motivation merged into one: Self Management Cluster. This Cluster has six sub-domains which include Self Control; Trustworthiness; Conscientiousness; Adaptability; Achievement Orientation and Initiative. The analyses of sub-domains of Self Regulation and Motivation of EIS and Self Management Cluster of ECI suggest strong similarities but also has few differences. Similarities are in sub-domains: Emotional Regulation and Delaying Gratification of EIS seems to be similar with sub-domain: Self Control of ECI. Furthermore, there are similarities between sub-domains: Emotional Recovery; Perseverance and Improvement Directed Strivings with sub domain: Adaptability of ECI, sub-domain of Goal Directed Preferences and Initiative Preferences of EIS with sub-domains: Achievement Orientation and Initiative of ECI. However, the other two sub-domains of ECI which includes Trustworthiness and Conscientiousness of Self Management Cluster apparently are not present in the EIS Scales: Self Regulation and Motivation. The reason may be because EIS is based on Goleman's model of 'EI' which used a priori frame work as a method of verification, whereas, ECI in it's composition used 40% items from Self Assessment Questionnaire developed by Boyatzis in 1991 (Boyatzis, 1994; Boyatzis, Cowen, & Kolb, 1995; Boyatzis, Leonard, Rhee, & Wheeler, 1996; Boyatzis, Murphy, & Wheeler, 1997; as cited in Bar-On & Parker, 2000) and the other 60% items were formulated by both Boyatzis and Goleman based on his non cognitive intelligence model of EI. The above differences may be attributed to the differences in the methodologies used in the development of the items in the two scales, both measuring the construct 'EQ'.

The results in Table 5 show Scale-IV: Empathy of EIS which has 3 sub-domains. However, Boyatzis and Goleman ECI's fourth cluster named as 'Social Awareness Cluster' instead of Empathy. Consequently, the comparative analyses show similarities and differences between the two instruments. The sub-domains of EIS: Being Considerate and Awareness about other's Perspective are similar to sub-domain of ECI:

Empathy of Social Awareness Cluster. However, sub-domain: Generous Rapport Developing of EIS seems different to the other two sub-domains of ECI's Social Awareness Cluster: Organizational Awareness and Service Orientation. Again like the earlier analyses of Self Regulation of EIS the differences reflect both the cultural, as well as methodological reasons. Focusing on the social and Organizational structure of Pakistan, it can be argued that probably majority of the organizations in Pakistan lack organizational skills and performance is poor in structured work set ups. Consequently, focus was not given to Organizational Awareness and Service Orientation in EIS as indicated in ECI. On the other side, it is also important to note that EIS is purely based on Goleman's model, whereas, ECI incorporates both Goleman's model of 'EI' and Boyatzis's work on competencies which were validated against performance of the managers and executives through Self Assessment Questionnaire.

Finally, the results in Table 6 show Scale-V of EIS: Social Skills, which has five sub-domains, which include Emotional Regulation in Relationships; Perception of Social Networks; Congenial Relationships; Leadership Abilities and Facilitative Communication. On the other hand, in ECI's Scale of Social Skills there are eight sub-domains, which include Leadership; Communication; Influence; Change Catalyst; Conflict Management; Building Bonds; Team Work and Collaboration and Developing Others. The comparison suggests similarities between Emotional Regulation in Relationships of EIS with Conflict Management of ECI; between Perception of Social Networks with Teamwork and Collaboration; between Congenial Relationships with Building Bonds and Developing Others; between Leadership Abilities with Leadership and finally between Facilitative Communication with Communication. However, Social Skills domain of EIS does not include two additional sub-domains: Influence and Change Catalyst of Social Skills domain of ECI. The reason may be again due to the different procedures used in the development of the two instruments. In addition, cultural differences could also be another reason. It is important to note that both the instruments: EIS and ECI are assessing trait based EI. However, it is suggested that in future, a comparison between two instruments needs to be made using similar procedures.

The results given in Table 7 show the last phase of the development of EIS. Only 2 items out of 321 items were rejected by a panel of experts who evaluated each item of the scale in the light of Goleman's theoretical framework using an a priori frame work.

CONCLUSION

In conclusion, EIS is an indigenously developed instrument which assesses trait based emotional intelligence. Although, it followed the theoretical rationale of Goleman (1995), but the items were formulated by clinical psychologists keeping the cultural needs / values of Pakistani society. It can be summed up briefly that the EIS is a positive step in the development of a scale of EQ.

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SUCCESS OF LOVE AND ARRANGED MARRIAGES IN WORKING WOMEN OF KARACHI: A COMPARATIVE STUDY

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ABSTRACT

The present study aimed at comparing the fates of Totally Love Marriages with Totally Arranged Marriages in working women residing in Karachi. The success of marriage was determined by the outcome of marriage. A structured interview form was constructed in order to find out the results of the marriages and to collect some biographical information from the individuals. Divorce and Separation were taken as the criteria for unsuccessful marriages and length (individuals who were currently living together and have been happily married for more than five years) of marriages was taken as a criterion for successful marriages. It was assumed that Totally Arranged Marriages will be successful as compared to Totally Love Marriages in working women of Karachi. A total number of 200 married working women either doing office work or serving as nurses, teachers, doctors, lawyers at different sites in Karachi participated in the study. Their age range was from 25 to 40 years and their academic qualification was from intermediate to postgraduate professional degrees. A chi-square test was computed for the statistical analysis of the data. The research findings provide the evidence that Totally Arranged Marriages are successful as compared to Totally Love Marriages in working women of Karachi. The result was significant at $p < .05$ level.

INTRODUCTION

Decision about the marriages is not a random factor and the institution of marriage is also regulated through the societal norms that define the range of potential marriage partners available to an individual. Michael, Gagnon, Laumann and Kolata (1994); Hill, Rubin, and Peplau (1976); Murstein (1972); and Silverman (1971) suggested that most people get married with the partners of similar race and religious

background. Murstein (1986) further explains it and says that this happens because the people with similar characteristics and background are more likely to come across each other and discover compatible interests and ideas. Every society has norms and customs regarding selecting a spouse. These norms are likely to vary for males and females, wealthy and poor, and for first marriage and second marriage.

In order to facilitate the present research the marriage systems have been explicitly drawn from the variables that most countries do not have the open courtship system common in Western nations. Some societies favour "Totally love marriages" where individuals are given free choice to select a mate and at times parents are not consulted or informed of the impending marriage whereas some favour "Totally arranged marriages" where the selection is usually made by parents and the couple is not involved in the decision making process.

In Pakistani society most of the marriages are arranged by parents and elders of the family. Usually in this type of marriages families arrange marriages for their offspring often without consulting the young people. The couples do not meet until their wedding day. In some cases parents take consent of the couple by exchanging photograph of prospective brides and bridegrooms and on the basis of it decide whether they like each other or not. At times these photographs and information about the prospective bride is provided by a go between or a matchmaker to parents and family members of both the parties involved.

The most important function of arranged marriage system is that it provides elder family member the power to have a check over younger family members and control over new members becoming part of the unit. Arranged marriage system also preserves family property, increase political linkages, preserves economic and social concerns, and keeps the family intact from one generation to another.

Usually in Pakistan the bride moves to the husband house and she must accept her in-laws where she shares the family's ideas about what is good and worthwhile and the members of the family basically bring a bride who according to them will adjust to the family values and daily activities. This practice keeps the cohesiveness of the family intact.

Christian (1997) reported that arranged marriages take place in Australia's Lebanese and other Arabic-speaking communities, as well as Turkish, Greek, Indian, Bangladeshi and Sri Lankan communities - within Muslim, Hindu and other religious groups. Around one in three marriages in the Arabic community are arranged, among both Christian and Muslim families. After the decision, making marriage becomes a social event and end with a good feast to many of their kinsmen, relatives and friends on the occasion. Cowell (1988) conducted a research and found 50 to 75 percent of all marriages in Egypt are arranged. Arranged marriages are more common in the villages of

Egypt than in its cities, they occur among all social classes. Ba-Yunus (1991) suggested that many Muslim families preserve family consistency and continuity through arranged marriages. Marriage in Islamic society is basically a family rather than an individual affair, and both sons and daughters are raised to expect arranged marriages. Although children do have veto power, the norm is to let the parents and other kin initiate and decide the matter. Thus, even college educated youth in countries like Pakistan do not think it is necessary for them to meet their future spouses before they are married.

AliBhai- Brown (1993) reported that Muslim youths living in the United States agree with their parents about the benefits of arranged marriages. When a journalist interviewed nine teenage Muslim girls at a school in Birmingham, three were envious of girls who had the freedom to go out and fall in love. The other six were either ambivalent or very critical of the way this freedom was used against the girls by boys who picked them up and discarded them without any concern for their self respect.

Many societies consider satisfaction as a vital factor in the success of a marriage. In collectivistic societies like Pakistan, the satisfaction is dependent on the socio-economic and family factors. Although some societies give importance to romantic love as a basis for marriage, but the aspects of psychological individualism make it difficult to develop and maintain the marital relationship.

Levine et al. (1995) studied attitudes about love and arranged marriages among college students in 11 different countries. The researchers predicted that in their views about love, people in Western, individualistic cultures would differ significantly from people in developing collectivistic cultures. To test this prediction, they had students respond to the question about love as a prerequisite for marriage originally used by Kephart (1967). The researcher also rated the values of each culture on a continuum from individualistic to collectivistic. As predicted, young adults from Western individualistic cultures (United States, Australia, and England) gave much more importance to romantic love as a basis for establishing a marriage than did people from Eastern Collectivistic cultures (Pakistan, India, Thailand, Philippines).

In Pakistan, emphasis is given to family decision. The families in turn look after the interest and well being of the individuals. This emotional dependence on families gives the feeling of security to the individuals. They consider group decision to be superior to the individual decisions. Hence, the marriages are generally arranged in Pakistan. However, on the other hand this fact could not be ignored that with the influx of Western culture through media the concept of dating has become common in Pakistan.

In the case of marriage relations if any problem arises between husband and wife, the society has evolved certain procedures of breakup in marriage. They are allowed to divorce or separate from each other and live an independent life. The union and break of ties depends much upon the social customs and relation evolved by the society to solve such problems. It is assumed that the divorce rate in some cultures is very

high as compared to Pakistani culture where marriages are mostly arranged. The love marriages are not based on realities as the spouses expect too much from each other before the marriage, which generally does not materialize. Ahmad and Cochinwala (1990) reported that the number of marriages and divorces taking place in Britain are on the rise. This report was based on figures presented during the international seminar held on the subject. According to the figure presented 1,40,000 divorces took place in Britain during the year 1980 alone. The seminar concluded that number of divorces was high because the women are day by day becoming more independent (economically) and so even little or unimportant matters lead to breakup of marriages.

Triandis (1994) reported that divorce rate vary widely by country, ranging from .01 percent of the population annually in Bolivia, the Philippines, and Spain, 4.7 percent in the world's most divorce prone country, the United State. To predict culture's divorce rates it helps to know its values. Individualistic cultures have more divorces than do communal cultures.

Unfortunately in Pakistan there is very little statistical data available about issues like divorce. Perhaps one survey in this connection was made in 1976 by Maternity and Child Welfare Association of Pakistan. It covered the urban population of Lahore and revealed that out of the married women falling in the age group of fourteen and fifty, 2.62 percent were divorced and 0.55 percent had been separated. The term separation here means that husbands and wives had ceased to have matrimonial life without formal divorce. There also existed a considerable possibility of a majority of these 0.55 percent women having got formal divorce in due course of time.

U.S Bureau of the Census (1975) reports that increase in the divorce rate has also accompanied urbanization, industrialization, and the shift to a conjugal family unit. Approximately 900,000 children are involved in divorce cases each year.

Furthermore, on the basis of the research findings of Dawood and Farooqi (1997, 2000), and Noor and Aslam (1985), it could be inferred that socio-economic status and education level of females are the significant factors in the marital adjustment of Pakistani females, these researchers also suggest that Pakistani non working females' education could enhance their marital adjustment. The Marital adjustment is a broad term. According to Burgess et al. (1963) a successful marriage may be defined as a "Union in which the attitudes and acts of husband and wife are in agreement of the chief issues of family, such as handling family finances and dealing with in-laws where they have come to an agreement upon interests, objectives and values where they have few or no more complaints about their marriage".

It has been observed that marital adjustment, high rate of divorce and mental illness are increasing day by day (Tariq, 1987) However, divorce rate in Pakistan is low

as compared to advanced countries. The main reason for a low rate of divorce in Pakistan is obviously the adherence to the tenets of Islam.

"Totally Love Marriages" system is also not a very successful system of marriage in collectivistic societies as this form of marriage is not approved of and the families does not support or motivate the couple in the marital adjustment because they were not involved in the decision making process of the marriages. Thus, with the complex pattern of interpersonal relationship involved in marriage, the growing percentage of Totally Love Marriages, and the changing socio economic set up in Pakistan the institution of marriage is made all the more complicated. Based on the research review and theoretical findings it was hypothesized that Totally Arranged Marriages will be successful as compared to Totally Love Marriages in working women of Karachi.

METHOD

Sample

The sample consisted of 100 married working women either doing office work or serving as nurses, teachers, doctors and lawyers at different sites in Karachi. 100 women were taken from the group whose marriages have "Totally Arranged" and 100 from "Totally Love" Marriages group. Their age range was from 25 to 40 years and their academic qualification was from intermediate to postgraduate professional degrees. A purposive sampling strategy was used. Two groups consisting of the Totally Arranged Marriages and Totally Love Marriages were compared with each other on their marital success.

Measures

Interview Form

A structured interview form was constructed in order to find out the results of the marriages in working women of Karachi. The Divorce and Separation were taken as the criteria for unsuccessful marriages and length (Individuals who were presently living together and have been happily married for more than five years) was taken as the criterion of successful marriages. Those who reported to be living together but not happy with their marital life were discarded from the sample.

Before the interview an effort was made to create a rapport with the participants. The following information was collected from each participant through structured interview form.

1. Age
2. Marital Status
   - Divorce
   - Separation
   - Successful (The individuals were specifically asked whether they are happy in their marital life or not?)
3. Place of residence
4. Educational Qualification
5. Occupation
6. Family income from all sources
7. Type of marriage
   - Totally Arranged Marriage
   - Totally Love Marriage

Statistical Analysis

Chi square test was computed to check the outcome of two systems of marriages (Totally Love and Totally Arranged Marriages) in the working women of Karachi.

Definitions of Variables

Totally Love Marriages

Totally love marriages are defined as the system of marriages in which the spouses are the only involved people in the decision-making process of the marriage, the family members and parents are not consulted.

Totally Arranged Marriages

Totally Arranged Marriages are defined as the system of marriages in which parents or elder family members select spouse for their daughters and sons and the couple is not involved in the decision making process.

Successful Marriages

Marriages in which spouses were presently living under one roof and have been living happily. The individuals were specifically asked whether they were happy in their marital life or not. In the light of the research findings of various previous researches only those couples who have been married for more than five years were taken, and who carry on living with each other but not satisfied were discarded.

Unsuccessful Marriages

Marriages were considered to be unsuccessful in case of Divorce (legal dissolution of marriage) or Separation (Spouses are not living together without dissolution of marriage).

Working Women

Working women are those married women who are doing full time jobs and are being paid.

RESULTS

The results of statistical analysis are shown in Table 1 and Figure 1. The results indicate that there is a difference in the groups. It is evident that "Totally Arranged Marriages" are successful as compared to "Totally Love" Marriages in working women of Karachi.

Table 1
Differences between the outcomes of "Totally Arranged Marriages" and Totally Love Marriages" in working women of Karachi

	Totally Arranged Marriages	Totally Love Marriages	Total
Successful Marriages	89 (83 Fe)	77 (83 Fe)	166
Unsuccessful Marriages	11 (17 Fe)	23 (17 Fe)	34
Total	100	100	200

($X^2 = 5.1$, $df = 1$, $p < .05$)

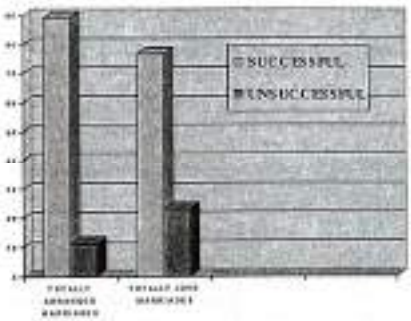

Figure 1: Differences between the outcomes of "Totally Arranged Marriages" and Totally Love Marriages" in working women of Karachi

DISCUSSION

The research hypothesis states that Totally Arranged Marriages will be successful in working women of Karachi as compared to Totally Love Marriages. The results of statistical analysis are shown in Table 1 and Figure 1. The result was significant at $p < .05$ level. The research findings provide the evidence that Totally Arranged Marriages are successful in working women of Karachi as compared to Totally Love Marriages.

It has been observed that in the families where females are economically independent there is a greater possibility that even unimportant matters may lead to divorce. Especially if the decision of marriage was taken only by the partners involved, in these cases the family avoids playing any role in helping the couple sustaining the relationship. However, if the family and parents were also involved in the decision making process of mate selection then the family provides the couple with all the possible help to continue with the relationship. It may be noted that in Pakistan marriage takes place between two families not between two individuals only.

It is believed that both the spouses are actively involved in career they will experience a lot of stress in their life. It is because the spouses have hectic schedules and less time available for leisure activities. This suggests that working females need cooperation of other family members for effective handling of life affairs. As working women day starts early, for she must feed her husband and children and send them off to

school before she herself rushes off to work. She comes backs tired in the evening and has to take care of other household affairs herself, hence due to lack of enough support she experience stress which influences her adjustment in marital life.

Keeping in view these facts and adverse effects of marriage failure on the family system of Pakistan an attempt was made in the present study to explore the conventional systems of marriage with a scientific outlook. The results of the present research clarify the contribution and the role played by two marriage systems in the outcome of marriages in the families of working women of Karachi. This study stresses the need for parents to understand the changing trends and realize how important it is for them to bring about some flexibility in their decisions. It is evident that the repercussions of the wrong decisions made by any one party i.e., either parents or spouses can be a big catastrophe in later life. It can be safely concluded from the results of the research that old systems of marriages cannot be abolished as they are the pillars of the Pakistani culture.

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A STUDY OF DEMOGRAPHIC FACTORS AND SYMPTOMS OF CONVERSION DISORDER IN AN OUTPATIENT POPULATION IN PAKISTAN

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ABSTRACT

The aim of this study was to examine the demographic profile and symptoms of patients presenting with conversion disorder for the first time in tertiary care health facility. All fresh patients with conversion disorder presenting to 5 major hospitals of Lahore, Pakistan fulfilling the diagnostic criterion of DSM-IV from 20 December 2003 till 20 June 2004 were included in the study. Their demographic profile and symptoms were assessed in detail in the form of a semi structured interview. Out of a total sample of 248, females comprised 87.5%; mean age was 23.65 years and the most frequently reported education level was 10 years of schooling or less (85.8%). The most commonly reported monthly income was Rs 10000 and below (83.1%), while 79.4% participants belonged to urban areas. 58.9% of the patients were unmarried. Marriage related problems (19.4%) were reported as the commonest stress factor while mixed presentation (62.1%) was the most frequent clinical presentation.

INTRODUCTION

Conversion disorder, previously known as hysteria or hysterical conversion has intrigued and baffled mental health professionals for a very long time. Infact it seems to be virtually the only psychological illness whose history goes back nearly 4000 years (Reed, 1971). The term "hysteria" has served in the past as an umbrella to a multitude of disorders (Merskey, 1995; Abse, 1987) presenting with symptoms originating from dynamic mechanisms (Breuer & Freud, 1955). However the current classifications i.e. the DSM – IV and the ICD – 10 have demystified it by dividing it into easily diagnosable categories i.e. conversion disorder, dissociative disorder and other somatoform disorders.

Hence research on such categories is need of the day so that we can gain insight into each category rather than of the term "hysteria" which has always been a fluid and a controversial term (Slavney, 1990).

Despite violent attacks from certain quarters (Slater, 1965), the diagnostic category of conversion disorder has not only survived in the test of time but also retained its classical clinical presentations as were prevalent in the Freudian era (Khan, Ahmad, Arshad, Ullah, & Maqsood, 2005; Subramanian, Subramanian, Devaky, & Varghese, 1980). Though on decline in the west (Reed, 1971; Singh & Lee, 1997), conversion disorder still continues to be one of the most frequently diagnosed psychiatric problems in Eastern countries such as Egypt (Okasha, 2004) and India (Subramanian et al., 1980). In Pakistan also conversion disorder presents very frequently in the psychiatry outdoors. Therefore, in a study conducted at an inpatient psychiatry department of Sir Ganga Ram hospital, Lahore in which all patients were diagnosed on the basis of ICD – 10, conversion disorder came out to be the fourth commonest disorder (Malik & Bokharey, 1999). In another similar study done at the Institute of Psychiatry, Rawalpindi General Hospital based on findings from a psychiatric case register of four years, conversion disorder ranked as the fifth commonest reason for admission in the psychiatry department (Minhas, Farooq, Rehman, Hussain, & Mubbashar, 2001). Moreover, in a review article, conversion disorder was reported to account for up to 10% of admissions in inpatient psychiatry departments in Pakistan (Amir, 2005). In view of the stated facts, conversion disorder is an area in which systematic research needs to be done and the present study was an endeavor in that direction. The aim was to undertake a systematic analysis of those patients with conversion disorder who were presenting in psychiatry departments of 5 major hospitals of Lahore, Pakistan for the first time. The purpose being to ascertain the modern day presentation of conversion disorder.

METHOD

Design

The research design used in this study was the survey method. The particular survey design used was the cross sectional design.

Sample

The sample comprised all patients with conversion disorder coming to the psychiatry outpatient clinics that fulfilled the diagnostic criterion of DSM–IV and had consulted the psychiatric facility for the first time during the course of their current illness. Prior to their interview with the researcher, these individuals had been thoroughly assessed by the psychiatrist and had undergone relevant investigations. The patients were excluded if they presented with comorbidity. The case history was obtained through a

semi structured interview. The average time spent in each interview was 45 minutes. A total of 248 patients were seen during the 6 month period.

Measures

A case history form was devised on the basis of prevalent format in psychiatry departments (Gelder, Mayou, & Cowen, 2001). This form was administered to all patients in the form of a semi structured interview.

Procedure

Nine persons with masters in psychology were hired for the research. In order to keep uniformity, a two - day workshop was conducted in which they were given briefing about the background and symptomatology of conversion disorder. They were also given the DSM-IV diagnostic criterion translated in Urdu. Furthermore they were guided on the administration of the demographic form through role play. These nine individuals were placed in five hospitals of Lahore, Pakistan two each in Mayo hospital, Services hospital, Sir Ganga Ram Hospital, Jinnah Hospital and one in the Punjab Institute of Mental Health. They remained in the psychiatry outpatient clinics of these hospitals daily from 9:00 am till 1:00 pm for a period of six months i.e. from 20th December, 2003 till 20th June, 2004 and administered the forms to patients with conversion disorder. Where required the informant of the patient was also interviewed.

RESULTS

Out of a total sample of 248, there were 217 (87.5%) females and 31 (12.5%) males. The mean age of our sample came out to be 23.65 years (SD = 8.68). The details of stressors and other demographics factors i.e. marital status, education, residence, monthly income, and the DSM-IV cluster are shown in table 1, and those of associated stressors in table 2 below:

Table 1
Demographic factors and DSM – IV cluster of participants

Variable	*N (%)*
Marital status	
Single	146(58.9)
Married	99 (39.9)
Widow/widower	2 (0.8)
Divorced	1 (.4)
Education	
Uneducated	51 (20.5)
Primary	50 (20.2)
Middle	52 (21.0)
Matric	61 (24.6)
F.A	20 (8.1)
B.A	9 (3.6)
M.A	2 (0.8)
Any other	2 (0.8)
No information	1 (0.4)
Residence	
Urban	197 (79.4)
Rural	44 (17.7)
No information	7 (2.8)
Monthly income	
No income	3 (1.2)
2000 & below	29 (11.7)
5000 & below	116 (46.8)
10000 & below	61 (24.6)
20000 & below	24 (9.7)
30000 & below	7 (2.8)
More than 30000	3 (1.2)
No information	5 (2.0)
DSM – IV cluster	
Mixed presentation	154 (62.1)
Seizures	75 (30.2)
Motor symptoms	17 (6.9)
Sensory symptoms	2 (0.8)

Table 2
Most commonly reported stressors by participants

Stressor	*N (%)*
Marriage related problems	48 (19.4)
Financial problems	30 (12.1)
Death of close relative	29 (11.7)
Discord among family members	27 (10.9)
Criticism by family members	17 (6.9)
Problem in love affair	17 (6.9)
Illness/ injury in family member	12 (4.8)
Conflicts with inlaws	11 (4.4)
Stress in family members	9 (3.6)
Academic stress	6 (2.4)
Strict home atmosphere	6(2.4)
Illness/ injury in self	4(1.6)
Job related problem	3 (1.2)
Physical abuse	3 (1.2)
Daughter born	3 (1.2)
Fear of having an illness	3 (1.2)
Miscellaneous	11(4.4)
Didn't share	9(3.6)
Total	100

DISCUSSION

Consistent with the previous findings (Hafeiz, 1980; Chaudhry, Arshad, Niaz, Cheema, Iqbal, & Mufti, 2005) females outnumbered males with a ratio of 7:1 respectively. Therefore owing to this sharp difference, the data was treated as whole rather than outlining gender differences of every variable. The mean age of our sample came out to be 23.65 years. Similar findings have been reported by other researchers (Khan et al., 2005; Pu, Mohamed, Imam, & Roey, 1986), where mean age came out to be 25 and 20.2 years respectively. The reason for this could be that the data in the present study was collected from adult psychiatry departments only. Furthermore in our setting this age tends to be crucial in view of the occupational, marital and social pressures exerting their maximum impact at this point in life. The individual at this stage is on the verge of independence vis – a – vis professional and marital areas which might expose him to stress especially so in our sociocultural context. We found more than half (58.9%) of the participants to be single unmarried. This is similar to the findings of Pu et al. (1986), where most of the sample was unmarried. These findings have also been confirmed earlier by Khan et al. (2005) as 65% of their sample was also unmarried. This

finding needs further research as majority of females tend to be married at this age. 83.1% of our sample had a monthly income of Rs. 10000 and below. This is in keeping with facts documented elsewhere (American Psychiatric Association, 1994; Binzer et al., 1997). This could be because most of our population attending government run hospitals hails from middle or low income groups. Patients from the upper socioeconomic group prefer to seek treatment from private clinics.

70.4% of our clinical population belonged to urban areas. This is in contrast with American Psychiatric Association (1994) but similar to the findings reported by Khan et al. (2005) where 71% of the patients belonged to urban areas. This is not surprising keeping in view that the study was carried out in teaching hospitals of a provincial capital and hence urban patients were more likely to seek help from there. Moreover, urban population might have a better awareness because of being in a better environment. As reported earlier (Subramonian et al., 1980) 65.8% of our sample had received 10 years of education or less. Our findings have reconfirmed the existing view that conversion disorder tends to be more common among the less educated.

The most commonly reported stress came out to be marriage related problems (19.4%). These stresses not only comprised marital discord but also other stressors such as being forced into marriage, inability to get married, spouse being much older, demand for dowry and so on. Similar findings were reported by Irfan and Badar (2002), where the total percentage of marriage issues came out to be 36% thus making them the top stressor in their study. The next significant stress was financial problems (12.1%) which is not surprising keeping in mind the most commonly reported income bracket in this study. Besides, conversion disorder tends to be more common in the economically underprivileged category (American Psychiatric Association, 1994; Binzer et al., 1997). Other significant stress factors were death of a close relative (11.7%) and discord among family members (10.9%). However, interestingly a closer look at the stress factors reveals that the cumulative percentage of family related problems such as discord among family members, stress in family members, illness/injury in family members, strict home atmosphere, criticism by family members and conflict with in-laws came out to be 33% which is overwhelmingly high. This is so because the family system in our country is very closely knitted and usually people reside in joint family system. Therefore, stress or illness in one member tends to affect the whole family. On the other hand, living in large families also increases the likelihood of friction amongst the family members which causes stress in the vulnerable member. Moreover, the expectations from the female, especially the younger ones in terms of looking after the household chores and other family members are very high. She is also not encouraged to protest in the phase of stress which is likely to heighten her distress in particular thus making her susceptible for developing conversion disorder. Therefore the etiology of conversion disorder in our culture is very much embedded within the family. An interplay of conflicts and constraints perhaps does not give freedom to a female to express her distress. Consequently she reaches a compromise in the form of a conversion symptom which not

only wards off her own anxiety but also diverts everyone's attention from the basic stressor. In addition, it also provides her with the sympathy and attention that she desires. Likewise, the category of birth of a daughter is also a stressor that is specific in our sociocultural context, where birth of a daughter is deemed as something unfortunate that has happened to a woman and more often than not she is even blamed for that. 3.6% patients while acknowledging the relation of their symptoms with a stress did not want to share it. The reason could be because this interview was conducted during their first visit and some patients take time to break their inhibitions.

Regarding presentation of symptoms cluster wise, the most common symptomatology fell in the mixed symptoms category (62.1%) followed by pseudo seizures (30.2%), motor symptoms (6.9%) and sensory symptoms (.8%). These findings are in contrast to the ones reported by Khan et al. (2005) where the most common DSM IV cluster came out to be sensory symptoms (53%), followed by motor symptoms (51%), mixed presentation (48%) and pseudoseizures (42%). The variability in these findings is interesting and needs further research. A significant finding in this study was that most of the patients presented with a mixed bag of symptoms rather than a single one pathognomonic of conversion disorder. This observation reported earlier (Hafeiz, 1980) needs to be confirmed with other findings as it can have significant cultural and dynamic explanations.

The present study suggests that conversion disorder still presents frequently in the outpatient departments of our hospitals. The reason could be that in societies such as ours people tend to pay more attention to physical symptoms rather than psychological ones. Thus psychological complaints such as feeling stressed over an unpleasant circumstance may go unnoticed for a considerable period of time, whereas a pseudoseizure or paralysis would not only arouse sympathy and attention from family but would also urge them to seek professional help instantaneously. However the figure in this study might be an under representation as most of our population resides in rural areas and takes such patients to faith healers rather than to psychiatry departments.

It would have been interesting to compare these patients with other patients presenting with different psychiatric disorders such as depressive disorder, anxiety disorders, etc. for the first time. However, this could not be done as the mentioned outpatient clinics did not keep a record of new patients.

Although on the wane in the west for many decades now, conversion disorder is still alive and kicking in less developed countries. Therefore systematic researches on the subject are the present day need. Moreover, it is indeed interesting that almost a century after Freud acquainted the world with conversion disorder; it still retains its classical clinical picture in our part of the world.

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INTERPERSONAL SENSITIVITY IN ADULTS WHO WERE VERBALLY ABUSED IN CHILDHOOD

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ABSTRACT

The present study is an attempt to investigate the interpersonal sensitivity in those adults who were verbally abused in their childhood. In the light of the literature review, it was hypothesized that adults who have been verbally abused in childhood will be at greater risk for developing interpersonal sensitivity as compared to those adults who have not been abused in childhood. In order to measure verbally abused childhood, a checklist questionnaire was prepared after conducting pilot study, where as Symptoms Assessment – 45 scale (SA-45; Strategic Advantages Inc, 2000) was selected for measuring interpersonal sensitivity of adults. The sample for the present research comprised of one hundred and four (104) adults, 49 males and 55 females. Their ages ranged between 18 to 26 years. Checklist questionnaire and SA-45 were administered on a large population, then on the basis of cut off scores, verbally non abused and abused groups were identified. t-test and other descriptive statistics were performed for analyzing the data. The result was significant indicating that the adults who have been verbally abused tend to have higher level of interpersonal sensitivity later in life as compared to those adults who have not been verbally abused in childhood ($t = 5.8708$, $df = 102$, $p<.000$).

INTRODUCTION

Child abuse is widely regarded as a cause of mental health problems in adult life. When abuse occurs especially repeatedly over an extended period of time, it can have a life long impact affecting a youngster's life. In most cases children who are abused or neglected suffer greater emotional or psychological trauma than physical damage. On the other hand, the fundamental damage caused by child abuse not only has an impact on the child's developing capacities for trust and intimacy but also on interpersonal relationship and attitude towards life. It is observed that whenever a child is

abused by an elder, it leaves devastating effects on their lives later in life. Abuse not only destroys the child's personality but also turns these victims into culprits later in life.

Child abuse is not a homogenous phenomenon but a range of varying phenomena. Differences exist with respect to a number of factors i.e., the nature of the act, the perpetrators and the circumstances. For instance The National Clearinghouse on Child Abuse and Neglect Information (2004) defines child abuse in the light of the Federal Child Abuse Prevention and Treatment Act (CAPTA) that any recent act or failure to act on the part of a parent or caretaker which results in death, serious physical or emotional harm, sexual abuse or exploitation or an act or failure to act which presents an imminent risk of serious harm.

Verbal abuse is difficult to define as it does not directly relate to physical evidence. It can be as devastating to the child as physical abuse, sexual abuse or neglect. In fact, some argue that psychological abuse is present in all other forms of child maltreatment (Pearl, 1988). Verbal and emotional abuse is defined in the Third National Incidence Study of Child Abuse and Neglect (NIS-3; Sedlak & Broadhurst, 1996) as three distinct forms of maltreatment:

- *Close confinement (tying or binding and other forms)*: tortuous restriction of movement as by tying child's arms or legs together or binding a child to a chair, bed or other objects or confining a child to an enclosed area (such as a closet) as a means of punishment.
- *Verbal and emotional assault*: habitual patterns of belittling, denigrating, scapegoat or other non physical forms of overtly hostile or rejecting treatment as well as threats of other forms of maltreatment (such as threats of beating, sexual assault, abandonment etc).
- *Other or unknown abuse*: overtly punitive, exploitative or abusive treatment other than those specified under other forms of abuse or unspecified abusive treatment. This form includes attempted or potential physical or sexual assault, deliberate with holding of food, shelter, sleep or other necessities as a form of punishment, economic exploitation and unspecified abusive actions.

Definitions of childhood emotional or verbal abuse are dependent upon historical, cultural and social contexts and vary widely. Verbal or emotional abuse is perhaps the most difficult to define. O'Hagan (1995) differentiates between emotional and psychological abuse:

- Emotional abuse is defined as "the sustained, repetitive, inappropriate emotional response to the child's experience of emotion and its accompanying expressive behavior".

- Psychological abuse is defined as "sustained, repetitive, inappropriate behavior which damages or substantially reduces the creative and developmental potential of crucially important mental faculties and mental processes of a child; these faculties and processes include intelligence, memory, recognition, perception, attention, imagination and moral development.

Verbal and emotional abuses chiefly hurt / destroy or directly attack on a child's emotions in different manifestations. Verbal abuse directly attacks on inner self of a child and adult as well. In addition American Academy of Pediatrics (2000) stated that emotional abuse is one of the most pervasive and damaging forms of child abuse. Belittling, ridiculing, name calling and being disrespectful and unreasonably critical toward youngster are some forms of verbal abuse.

According to National Child Abuse Hotline (2004) emotional abuse includes intentional verbal or behavioral acts that results in adverse emotional consequences. Emotional neglect occurs when a caretaker intentionally does not provide nurturing verbal and behavioral action that is needed for healthy development. Emotional abuse can include rejection, scapegoat assignment, isolation, criticism and terrorizing of a child.

Verbal abuse is a pattern of behavior that impairs a child's emotional development. This may include constant criticism, threats or rejection as well as withholding love, support or guidance (National Clearinghouse on Child Abuse and Neglect Information, 2004).

Whenever verbal abuse occurs especially repeatedly over an extended period of time, it can have a life long impact affecting a youngster's happiness, relationships and success. He or she may become somber, unable to enjoy and prone to self-defeating behaviors. At the extreme, he or she can become self destructive, engaging in self-mutilation and even attempting suicide (American Academy of Pediatrics, 2000).

It is children's perception of others attitude to them (reflected appraisals) that determine which attitudes are internalized and become part of the self-concept. In support of this view Harris and Howard (1984) found that the type of self-criticism reported by high school students (e.g. lazy, selfish, quarrelsome) was linked to corresponding criticisms they remembered their parents made.

It was found that high self-criticism or perfectionism is correlated with reports of having received less satisfactory parenting including less warmth and affection more harshness and strict control (Andrews & Brown, 1990; Firth-Cozens, 1992; Frost, Lahart & Rosenblat, 1991). On the other hand Frost et al. (1991) reported that perfectionism in daughters was consistently associated with daughter's reports of maternal and paternal harshness but only with mother's self reports of harshness.

In the nutshell, verbal abuse is manifested when children are not given love, approval and acceptance. They may be constantly criticized, blamed, sworn and shouted at and told that other people are better than them and rejected by those they look to for affection.

Researchers found that in Pakistani community there is no specific law and rule being followed or operated for treating a child. Child usually seems a personal property of their guardians. There is no check and balance that exists in the Pakistani community to check whether the guardian is properly treating a child or not. This dimension has developed an interest to explore the adult interpersonal sensitivity as a result of verbally abused childhood in the Pakistani community.

In the light of above mentioned facts and researches revised previously, the following hypothesis is formulated: Adults who have been verbally abused in childhood will be at greater risk for developing interpersonal sensitivity as compare to those adults who have not been abused in childhood.

METHOD

Sample

This research has been carried out at Federal Urdu University (Gulshan-e-Iqbal campus) Karachi. Data was collected from various departments. Departments were randomly selected. Federal Urdu University is a co-education institution that is why availability of both genders was at ease and in addition students get admission from various socio-economic status including different ethnic groups.

A purposive sampling procedure was used. For identifying adults who were abused and not abused in their childhood, checklist questionnaire and SA - 45 scale were administered on a large sample. On the basis of cutoff scores (pilot study) abused and non-abused participants have been identified but the following data has been excluded.

- Participants who were meeting the criteria for abused group but they also mentioned or described on question 6 any painful and unforgettable event in their lives.
- Participants who were married and those who were less than 18 and more than 26 years old.

The original sample comprised of 139 participants but on the other hand above-mentioned data has been excluded for the purpose of controlling extraneous variables. So the sample size was reduced to 104 students including 49 males and 55 females. Their age ranged between 18 to 26 years with a mean age of 21.4 years. All of the participants belonged to Honors and Master programs which are offered by Federal Urdu University.

Measures

1- *Checklist questionnaire*

Checklist questionnaire identified various demographic information. 1 - 5 questions [using a 5 point rating scale ranging from "not at all (1)" to "always (5)"] measure verbally abused childhood. Question No. 6 required descriptive answer and measured any painful and unforgettable event of participant's life that would be other than verbally abused childhood.

2- *Symptoms Assessment - 45 (SA – 4;* Strategic Advantages, Inc. 2005)

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

Procedure

The data was collected from various departments of Federal Urdu University (Gulshan-e-Iqbal campus) Karachi. Formal permission for data collection was taken from the chairperson of various departments. The first few minutes were spent putting the students at ease and the purpose of the study was explained and discussed in very general terms so as not to influence subject's responses (this explanation was kept constant in every classroom setting). The researcher assured the confidentiality of subject's personal information and the test results. The subjects were then asked for their cooperation.

Checklist questionnaire and SA - 45 scale were distributed in the classroom setting. They were told to fill demographic information first then researcher loudly read instructions and asked about any confusion that participants had. Then researcher loudly started explaining every question and their response options for the purpose of overcoming their hesitation and building trust and rapport. Participants were allowed to ask question if they had any difficulty in understanding the question (all explanations of the questions and procedure were kept constant in every classroom setting). After the completion of questionnaires, students were thanked for their cooperation and time.

Statistical analysis

The statistical measures applied for the analyses of the scores are mean, standard deviation and t-test, computed on SPSS (version 11.0), Minitab and Excel.

Operational definitions

Verbally abused childhood

"If an adult who gets following treatment by other people "most of the time" or "always" during the age of 3 to 12 years and this abused childhood is still painful and unforgettable for him or her i.e., being too critical, abusive language, calling names, shouting or taunting and threat of physical abuse".

Interpersonal sensitivity

The respondent's symptomatic feelings about himself or herself in relation to others. These include feeling inferior or self conscious around others, feeling that others are sympathetic or unfriendly and feeling uneasy when others are talking with or watching the respondent.

RESULTS

Table 1
Mean and SD of interpersonal sensitivity of verbally abused and non abused group

Groups	*N*	*M*	*SD*
Non Abused	51	6.80	1.76
Verbally Abused	53	11.89	4.75

Table 2
Independent sample t-test of verbally abused and non abused group

Groups	*t*	*df*	*SED*	*Sig.*
Non Abused & Verbally Abused	5.8703	102	0.75	.000

t-value indicates that there is a statistically significant difference in the level of interpersonal sensitivity among verbally abused and non abused group.

DISCUSSION

The hypothesis of this research is supported by the results and is significant at $p < .000$, which is less than α .05 level of significance. It is clear from table 2 that there is a statistically significant difference in the level of interpersonal sensitivity among verbally abused and non abused group (t =5.8708, df = 102, $p < .000$). Whereas the table 1 depicts the mean and standard deviation of verbally abused and non abused group. It is concluded that verbally abused childhood contributes to psychological problems i.e. interpersonal sensitivity later in life as compared to non-abused childhood.

Adult psychological problems linked to abused childhood could have entirely specific effects related to traumatic experience or could be contributed to a wider constellation of disruption of interpersonal and intimate relatedness. Abused children not only face an assault on the developing sense of the identity but a blow to their construction of the world as a safe enough environment and their sense of others as being trustworthy. Children who are abused and neglected by caretakers often do not form secure attachments to them. These early attachment difficulties can lead to later difficulties in relationships with other adults as well as with peers (Morrison et al., 1999).

According to American Academy of Pediatrics (2000), emotional abuse can have serious emotional consequences and long term repercussions. Like more violent form of abuse i.e., emotional abuse can impair child's self image and self esteem and interfere with his ability to function well in society. He / she may have difficulty making friends and relating to peers. The experience of child maltreatment may create difficulties in developing social support networks. Abused children may have difficulties in creating and maintaining social networks.

Child maltreatment can interfere with a person's ability to develop meaningful and appropriate relationships from childhood through adulthood. Abused and neglected children are consistently rated by their peers as demonstrating socially undesirable behavior (Feldman, Salzinger, Rosario, et al., 1995).

Children displaying multiple psychological and behavioral problems often have a difficult time both developing and maintaining healthy relationships. Victimization reduces social competence and limits empathic ability, both of which are necessary to establish satisfying relationships with others. Maltreated children have been known to display the following interpersonal problems: insecure attachments to parents and caregivers (Cicchetti & Toth, 1995), loss of close friends (Oates, 1996), difficulty in trusting others (Varia, Abidin, & Dass, 1996), relationship problems such as overly sexualized or overly conflicted relationships (Gilmartin, 1994; Varia, Abidin, & Dass, 1996; Loos & Alexander, 1997), and chronic dissatisfaction with adult relationships and fear of intimacy (Gilmartin, 1994; Singer, 1989).

It is concluded and quite evident that the experience of abuse at a vulnerable moment where the child is learning to trust others predisposes to a specific deficit in forming and maintaining intimate relationships. The attribution of lack of concern and a tendency to be intrusive and over controlling in relationship could be a product of these abused victim's actual attitude and behavior or could reflect primarily the expectations, interpretations and projections directed at the people by with the history of abused. In the context of the present research, further researches regarding abused childhood and adolescence and other psychological problems resulting from it are suggested.

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IDENTIFICATION OF SHYNESS IN COLLEGE WOMEN OF LAHORE, PAKISTAN

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ABSTRACT

The present study identified shyness in college women of Lahore, Pakistan. A purposive sample of 1154 college women was collected from Fatima Jinnah College for Women, Lahore College for Women University, Garrison Post-Graduate College and Kinnaird College for Women. Submissive Behavior Scale (SBS; Allen & Gilbert, 1997), Shyness Questionnaire (SQ; Bortnik, Henderson, & Zimbardo, 2002) with a bio-data form was used for the survey. Descriptive statistics were calculated for the seven demographic variables. Almost 19% and 6% of the participants scored two standard deviations (SD) above the mean while 48% and 38.6% scored 1 SD above the mean of SBS and SQ, respectively. A significant Pearson Product Moment Coefficient of Correlation of .69 was identified between SBS and SQ scores. The Chronbach alpha for SBS and SQ was .73 and .86 respectively. The relationship between shyness and demographic variables were discussed highlighting the role of culture.

INTRODUCTION

Shyness is considered as one of the most frequently identified psychological problems prevalent around the globe. Shyness in human beings has been commonly observed in many countries by teachers, parents and mental health professionals (Beidel & Turner, 1999; Stein & Walker, 2002). However, it is not a psychological disorder as it does not fulfill any diagnostic criteria provided in the Diagnostic and Statistical Manual for Mental Disorders-IV edition (American Psychiatric Association; APA, 1994).

According to Stein and Walker (2002, p. 4) "Shyness refers to a tendency to withdraw from people, particularly unfamiliar people". Henderson and Zimbardo (in press, p.1) quote: "Shyness may be defined experientially as discomfort and/or inhibition in interpersonal situations that interferes with pursuing one's interpersonal or professional

goals. It is a form of excessive self-focus, preoccupation with one's thoughts, feelings and physical reactions".

Beidal and Turner (1999) and Henderson and Zimbardo (in press) have reported that shyness effects an extremely large percentage of the American population, nearly 50% in varying degrees. Henderson and Zimbardo found that 40% of adults in United States reported themselves to be chronically shy and that it creates problems in their lives. Henderson and Zimbardo (in press) and Stein and Walker (2002) suggested that severe forms of shyness may even be on the rise.

Zimbardo (1977) discovered that 42% of the American students stated experiencing shyness at the time of assessment. The Hawaiian and Japanese participants reported the highest percentage of 60%. The students from India reported 47%. The lowest percentage was for the Israelis (31%) and Jewish Americans (24%). Some studies estimate prevalence rates of extreme shyness as high as 13.3% (Nicastro, Laskin, Rapo, & Benisovich, 1999). According to Kagan (1989) about 15% of two year old Caucasian children were consistently shy and emotionally subdued in unfamiliar situations. A majority of the group retained these profiles through the next eight years of their lives. Therefore the shy temperament is not transitory.

Identification of shyness is important because according to Bell (1992) numerous studies have found that shy people report higher levels of depression and anxiety, even without appearance of clinical syndromes. Not only is shyness a commonly existing problem but it affects the life of shy people negatively (Robins & Rutter, 1990) leads to psychopathology later in life (Wicks- Nelson & Israel, 1984) like social phobia (Bruch, Gorsky, Collins,& Berger, 1989; Heiser, Turner, & Beidel, 2003; Cox, MacPherson, & Enns, 2005), behavioral problems (Gilbert & Allan, 1994; Hinde, Tamplin, & Barrett, 1993), juvenile delinquency or mental health problems (Calliss, Frosh, & Michie, 1987) and social withdrawal and decision making problems especially among women (Addison & Schmidt, 1999). Shyness has even been related to pervasive social dysfunction in adulthood like Schizophrenia (Goldberg & Schmidt, 2001), multiple problems of discomfort and inhibition (Amico, Bruch, Haase, & Stanner, 2004), allergies (Bell, 1992) and substance use (Page, 1989). Interestingly shy individuals suffering from HIV deteriorated faster on their viral load as compared to non shy HIV patients though they were being medically treated similarly (Drug Week Editors, 2004). Robins and Rutter (1990), Hamer and Bruch (1997) and Carducci (2000) found that shy individuals are late in most of the life events like college education, career and marriage. About 13% of shy persons reported experiencing peer rejections (Cillessen, Van Ijzendoorn, Van Lieshout, & Hartup, 1992).

King, Mulhall, and Gallone (1989) found that girls reported significantly greater levels of social fears than boys. Similarly, Zimbardo (1977) believes that adolescence may generate more shyness among girls than boys; though he claimed that more college

men report being shy than college women. Spooner, Evans, and Santos (2005) reported that not only did girls label themselves as shy more frequently than boys but girls rated themselves as more shy than shy boys. Henderson and Zimbardo (in press) also mention that in Mexico males are less likely than females to report shyness. However they concluded that on the whole there were no gender differences in reported shyness. Similarly News and World Report, Inc. (1983) and Hamer and Beach (1997) reported no differences in gender with regard to shyness.

According to Jackson and Martillier (1983) for a minority of adolescents, social and interpersonal problems remain a significant problem since early childhood. Weiner believes that excessive shyness may seriously impair their ability to socialize with others and some may never develop satisfying social relationship. Some authors are of the opinion that many of the shy people develop the problem in adolescence (News & World Report, Inc., 1983; Carducci & Zimbardo, 1995).

Personal discussions of the present researcher with several clinical psychologists in Lahore from September through December, 2002, reflected that many of the psychiatric clients that they treated were shy since childhood. This experience was congruent with the Western literature like retrospective studies cited by Resnick (1989) that related anxiety and depression to childhood shyness. Most of Pakistani clinical psychologists were of the opinion that the problem of shyness is more prevalent in Asian countries and seem to be directly related to the culture. This outlook has been supported by comparative studies between Asian countries like Thailand and American adolescents by Weisz, Suwanlert, Chaiyasit, Weiss, Achenbach, and Eastman (1993). Even Paulhus, Duncan, and Yik (2002) found that shyness is more prevalent among East Asians than among those of European heritage. Hermans and Betz (2004) also discovered that African Americans were significantly less shy than Asian Americans or European Americans. These findings indicate an interaction between the shyness and cultural variables.

Despite the literature available from western journals and books, the present researcher did not come across any evidence on the prevalence rates of shyness in Pakistani population. The scarcity of research work with shy individuals in Pakistan highlights the need to conduct studies on the issue of shyness. Therefore, the present research sought to identify shyness in college women through a survey in Pakistan.

The aim of the present study was to identify college women scoring 1 standard deviation (SD) and 2 SD above the mean of Submissive Behavior Scale and the Shyness Questionnaire. Further the study also aimed to discover demographic variables of the participants with the help of a bio-data form.

METHOD

Sample

Through Purposive Sampling, 3154 college women, with a mean age of 17.24 years were screened for shyness from four colleges of Lahore. They were: Fatima Jinnah College for Women, Chuna Mandi, Lahore (FJC), Lahore College for Women University, Lahore (LCWU), Garrison Post-Graduate College (GPC) and Kinnaird College for Women, Lahore (KC). Survey Method was used to screen out college women with the problem of shyness.

Measures

(1) Bio-Data Form: A bio-data form was used to identify demographic variables, including college, age in years, educational level, birth order, siblings, family system and family monthly income along with the name of the participant.

(2) Submissive Behavior Scale (SBS): SBS (Allan & Gilbert, 1997) comprising of 16 items was administered to measure submissive behavior. A five-point Likert Scale ranging from 0 (*never*) to 4 (*always*) was used for rating.

(3) Shyness Questionnaire (SQ): SQ (Bortnik, Henderson & Zimbardo, 2002) comprising of 35 items was administered to measure shyness. A five-point Likert Scale ranging from 1 (*not at all characteristic*) to 5 (*extremely characteristic*) was provided for rating each item. The current version of the SQ produces a shyness quotient, the "sq" that is the mean rating on the SQ.

Procedure

First, permissions were obtained from the principals of the four colleges to carry out the study. A pilot study preceded the survey. The purpose of the pilot study was to check the feasibility, comprehension level and time taken to complete the two screening scales. Written consent was taken from all participants. Participants were assured of anonymity and confidentiality. The pilot study included administration of the two scales followed with a structured questionnaire developed by the researcher to obtain the participants' feedback. The pilot study was carried out with 100 students of FJW. Verbal and written feedback showed that most of the students found English language difficult to understand. Therefore, it was decided that all the research assessment tools should be translated into Urdu language for better comprehension.

The Back-Translation of SQ and SBS into Urdu was carried out with the help of people with at least a Masters Degree in Psychology. Back Translation was carried out in two steps. In the first step, five independent translators translated the scales into Urdu language. Committee 1 comprising of three members then reviewed each of the translations. The committee members in the present and later committees were two practicing clinical psychologists and were headed by the research supervisor. The committee members reviewed the translations independently to maintain objectivity in selection of the items. Only those items were selected that were rated eight or above on a scale of 1-10; higher rating indicated that the translated item was conceptually closer to the original item. Seventeen items were rated below eight, therefore they were sent to a new set of five individuals to be translated into Urdu again. The Committee 1 members selected the second set of 17 Urdu translations in another meeting by rating all of the 17 items above eight.

The selected Urdu items were then given to another new group of five people to be Back Translated into English. Committee 2 comprising of three people reviewed the English items. All items were rated above eight, on the 1 to 10 scale, as to their similarity to the original scale items.

Once the scales were translated into Urdu language, it was decided that the scales would be provided to the participants in two languages: English and Urdu so that the items could be comprehended easily by the bilingual participants.

A second pilot study for the feasibility of the English and Urdu versions of the scales was then carried out with another group of 100 students of FJC. The results from the feedback questionnaire showed that the items were clearly understood. The administration of the two scales took an average time of 20 minutes and the participants reported very little fatigue.

The survey was then carried out with 3154 college girls. There were 431 participants from FJC, 1447 from LCWU, 991 from GPC and 285 from KC. The participants gave written consent before the administration of the screening tools in group setting. A short bio-data form was also administered to identify the seven demographic variables of the participant. Statistical Package for Social Sciences (SPSS) Version 15 was used to organize the results. Descriptive statistics used included frequencies and percentages. Pearson Product Moment Correlation between the scores of SBS and SQ was carried out to find the validity of the two scales. Chronbach Alpha coefficient was also calculated for both of the scales to establish their reliability.

RESULTS

Table 1
Frequency and Percentage of the Demographic Variables of Colleges, Age and Educational Level

Demographic Variable	Sub-type	Frequency	%
Colleges	KC	285	9.0
	GFJ	431	13.7
	GPC	991	31.4
	LCW	1447	45.9
Age group	14-16 years	1029	32.6
	17-18 years	1555	49.3
	19-22 years	557	17.7
	Missing data	13	0.4
Educational group	F.A.1	1230	39.0
	F.A.2	782	24.8
	B.A.1	993	31.5
	B.A.2	149	4.7

Table 2
Frequency and Percentage of the Demographic Variables of Birth Order, Number of Siblings and Family System

Demographic Variable	Sub-type	Frequency	%
Birth order	1st – 3rd born	2276	72.2
	4th - 6th born	745	23.6
	7th -11th born	117	3.7
	Missing data	16	0.5
No. of siblings	0-3 siblings	928	29.4
	4-5 siblings	1514	48.0
	6 and above siblings	707	22.4
	Missing data	5	0.2
Family system	Joint	802	25.4
	Nuclear	2342	74.3
	Missing data	10	0.3

Table 3
Frequency and Percentage of the Demographic Variable of Family Monthly Income

Demographic Variable	Sub-type	Frequency	%
Family monthly income	Rs.4,999-14,999/-	924	29.3
	Rs.15,000-34, 999/-	1340	42.5
	Rs. 35, 000 – 50, 000 and above	841	26.7
	Missing data	49	1.6

Table 4
Pearson Product Moment Correlation between Submissive Behavior Scale (SBS) and Shyness Questionnair (SQ)

Scales	*N*	*r*	*p*
SBS	3073		
		.485	<.01
SQ	2951		

Table 5

Sample (*N*), Mean (*M*), Standard Deviation (*SD*) and Percentage (%) of the Participants Scoring Significantly on Submissive Behavior Scale (SBS) and Shyness Questionnaire (SQ)

	SBS	SQ
N	3073	2951
M	21.4	2.5
SD	7.6	.6
No. of participants scoring 1 *SD* above *M*	1514	844
% Scoring 1 *SD* above *M*	49.3%	28.6%
No. of participants scoring 2 *SD* above *M*	579	177
% Scoring 2 *SD* above *M*	18.8%	6%

DISCUSSION

The survey's main objective was to screen college women with the problem of shyness using two psychometric measures: SBS and SQ. In addition seven demographic variables were also assessed with a bio data form.

A total of 3154 participants took part in the survey. The number of participants from each college was approximately proportionate to the size of the colleges surveyed. The four colleges represented the three socio-economic levels: low, middle and high socio-economic level. GFC represented the low socio-economic level, LCW and GPC represented the middle socio-economic level while KC represented the high socio-economic level. The colleges were assigned to these socio-economic levels according to their fee structure. The results regarding colleges' show that most of the participants were from GFC (31.4%) and LCW (45.9%) that represented the middle socio economic class (See Table 1). This finding is supported by the results regarding the family monthly income (See Table 3). The results indicated that the majority that was 42.5% of the participants had a family monthly income between Rs. 15, 000 to 34, 999.

The research participants' ages ranged between 14 to 22 years. The majority nearly 50% of the participants had ages between 17-18 years while 32.6% had ages between 14 to 16 years (See Table 1). The frequency of 19-22 years olds was low because the number of students tends to decline in Bachelor courses in Pakistan. This trend is even evident in the results related to the variable of educational group that shows 63.8 % participants were students belonging to the first two years of college. The decrease in enrollment could be attributed to many causes for example many students shift out to professional colleges after the basic two year education at the college. Cultural norms related to gender roles in Pakistan like girls should be married as early as possible or higher education is not necessary for girls may be some of the possible causes also.

Results regarding the birth order of the participants showed that majority: 72.2% was between the first to third birth positions (See Table 2). Zimbardo (1977) was of the view that first born was more prone to shyness because the parents have high expectations from them. The child who is already temperamentally shy or socially sensitive would succumb to the pressure by becoming more withdrawn. Crozier and Burdsey (2003) cited a number of researches that either support or negate Zimbardo's finding. However, according to Kagan, Reznick and Snidman (1988) later born are shyer than first born. In a longitudinal study, they found that two-thirds of the inhibited children were later born while two-thirds of the uninhibited children were first born. They reasoned that the first born are physically and emotionally more developed than the younger siblings with the results they could yell, snatch or tease a younger sibling. If the younger child has a low threshold for limbic arousal, such interactions would become a chronic stressor that would change the temperament into trait shyness.

The results concerning number of siblings showed that approximately 50% had 4 to 5 siblings (See Table 2). This seems to be true of an average number of children most Pakistani families have.

Results about the family system of the participants show that the majority: 74.3% belonged to the nuclear family system (See Table 2). Though joint family living was the general life-style in Pakistan, changes are evident from the present results. Economic factors, urbanization trends and changes in social values and norms regarding the family institution could be attributed as the possible causal factors.

The majority of the participants: 42.5% had a family monthly income of Rs.15,000 to Rs. 34, 999 with 29.3% having a family monthly income of below Rs. 4, 999 to Rs. 14, 999 (See Table 3). Thus more than 72% of the sample belonged to a low to middle socio-economic class.

The results showed that missing data ranging from 0% to 1.6% regarding the demographic variables (See Table 1-3) seem to indicate that the data loss due to

instrumentation was minimal. However, no generalizations can be made for either the urban or rural communities on the basis of present results as the sample was not a representative one.

The result on Table 4 shows a significant ($p < .01$) Pearson Product Moment Correlation coefficient of .69 between the SBS and SQ scores. This seems to indicate that both the tools are measuring a very similar construct. The Chronbach alpha for SBS and SQ was .75 and .86 respectively. Thus the internal consistency for SBS is acceptable while it is good for SQ (George & Mallery, 1999).

The results showed that 18.8% of the women who completed the SBS scored 2SD above the mean. On the other hand, 6% of the women who completed the SQ scored 2 SD above the mean (See Table 5). The percentages seem to vary though the correlation between the two scales was a positive and significant one. It is possible that the submissive behaviors identified may not be only due to shyness. It could be because of respect or compliance that is strongly reinforced in the socialization process of females in Pakistan.

Results also show that 28.6% and nearly 50% of the participants scored 1SD above the mean of SQ and SBS respectively (See Table 5). The latter percentage is very similar to the percentages reported by Zimbardo (1977) for the Indian students (47%). The 49.3% is also similar to the 48% reported for American adults by Henderson and Zimbardo (in press). However it's not as high as 60% reported for Hawaiian Hawaiians and Japanese people nor is it as low as 31% and 24% that are reported for Israelis and Jewish Americans respectively (Zimbardo, 1977). The present research seems to highlight the importance of the interaction between cultural norms and shy temperaments.

Pakistan culture does share the socialization process with Japan that forms the roots of shyness according to Zimbardo as cited in Psychology Today (no date). Zimbardo believes that Japan has higher levels of shyness because if a child succeeds the significant others get the credit. On the other hand, if he/she fails the blame is onto the child. With the belief of "I can't win' Japanese children are modest and quiet. The socialization is similar in Pakistan. The attributional style in Israel is just the opposite according to Zimbardo, thus the low prevalence rates of shyness.

A total of 324 women that are about 10% of the total Survey sample scored 2SD above the mean of SBS and SQ. The 10% seems to be similar to the 13% prevalence rates reported by Nicastro et al (1999) for extreme shyness and even to 15%-15% for Social Phobia in women (Davison & Neale, 2001; Mason, et al., 2004; APA, 1994). It is quite higher than 5.5% that was reported for social anxiety disorders (Nicastro et al., 1999). Some of the writers tend to explain Social Phobia as the extreme end of the shyness continuum while some believe that shyness and Social Phobia are two distinct entities (Spooner, Evans & Santos, 2005). Others believe that shyness leads to Social Phobia and

Avoidant Personality Disorder (Bruce, 2000). To find the relationship between Social Phobia and shyness further research is recommended.

Cultural differences and similarities do exist for shyness. In China shyness reflects social maturity, understanding and sensitivity (Eisenberg, Fidada & Liew, 2001). However, the authors found that shy Indonesian children faced peer rejection and were not chosen for leadership roles just like the American children. Similarly, Cillessen et al. (1992) identified cultural similarities between the United States and Netherlands: social rejection involves shyness from 10% to 20% of the time.

In Pakistan, which is a patriarchal society, the concept of "Sharm" and "Haiya" are considered positive attributes in a female gender role. The concept of "Sharm" is similar to shyness while "Haiya" refer to modesty and chastity. Metaphorically they are said to be the "ornaments of a woman". Women who assert themselves are generally looked down upon in Pakistani society. The present researchers believe that shyness is present more in Pakistani women than men because they learn the shy role from the shy female models and the reinforcement by the society for the submissive roles.

The Pakistani society seems to share the 'collectivist culture' with other eastern countries. Eisenberg et al. (2001) describe a collectivistic culture as one that promotes maintaining personal relationships and interpersonal harmony with close others. Pakistani people, predominantly women, are concerned with the consequences of their behavior on other members of the group and engage in pro-social behaviors for the good of the group rather than themselves. For example, Thai adolescents were reported to show more over-controlled problems like shyness than American adolescents. It seems that the Thai Buddhist culture that discourages aggression and encourages self-control, emotional restraint and social inhibition perpetuates shyness (Weisz et al., 1993).

LIMITATIONS AND RECOMMENDATIONS

The present sample was an opportunistic one therefore the prevalence rates of shyness and its types in women and also men need to be established with representative samples. Due to the limitations of publishing criteria, the relationship between seven demographic variables and shyness could not be highlighted and discussed. Future articles will cover this limitation. The validity, reliability and norms of the Urdu version of SBS and SQ need to be established. Future researches preferably longitudinal ones are recommended to find the relationship between psychopathology and shyness and its developmental patterns in the Pakistani community and to discover effective management methods for the problem of shyness.

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BEHAVIOR THERAPY: IT'S APPLICABILITY IN THE REDUCTION OF MALADAPTIVE BEHAVIOR OF AUTISTIC CHILDREN

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ABSTRACT

The present research was designed to study the applicability of Behavior therapy on autistic children by using its techniques of Positive and Negative reinforcement. It was hypothesized that (1) Treatment with positive reinforcement will increase the desired behavior of the autistic children as compared to that of Autistic children with no treatment (2) Treatment with negative reinforcement will increase the desired behavior of the Autistic children as compared to that of autistic children with no treatment and (3) Treatment with positive reinforcement will be more effective than treatment with negative reinforcement. The sample comprised of 120 autistic children, 56 girls and 64 boys, (belonging to all socioeconomic levels with the age limit of 6 to 12 years) coming to a neuromuscular rehabilitation center of Karachi. It was divided into three equal groups, including a control group, to implement selected techniques of behavior therapy. The treatment packages consisted of the use of positive reinforcement, negative reinforcement and no treatment. Previously, three target behaviors crying, non-compliance and hitting were selected for the treatment. In order to study the possible causes of target behaviors and selection of reinforcers, Motivation Assessment Scale (MAS) by Durand (1990) was administered. The record of occurrence of target behaviors before and after the implementation of 30 sessions was taken. *t*-test for independent mean and ANOVA were applied for statistical analysis. It was found that Behaviour treatment with Positive Reinforcement and Negative Reinforcement are effective to reduce maladaptive behavior in autistic children (t=-8.395, df=78, p<.000) and (t = -11.366, df=78, p<.000) respectively. Further it was shown that treatment with positive reinforcement is more effective as compared to negative reinforcement (t=-2.65, df=78, p<.000).

INTRODUCTION

Autism is a syndrome which is studied under the heading of Pervasive Developmental Disorder according to DSM-IV T-R (APA, 2000). These disorders are characterized by deficit in appropriateness in communication and social interaction in addition to peculiarities of behavior with different intensities and combinations.

Now in present day researches shows that early intensive behavioral programs can abolish completely the symptoms of autism in some children and to a great extent improve the functioning of many others (Smith et al., 1997; McEachin, Smith, & Lovaas, 1993; Lovaas, 1987). The research literature has demonstrated that treatment techniques based upon the behavioral approach are the only techniques that have been empirically shown to be successful in the treatment of autistic children (Koegal & Schreibman, 1982). The work of many researchers like (Perry, Cohen & DeCarlo, 1995; Luce et al., 1995; Wetherby, Koegel & Mendel, 1981) has supported the concept that early intensive therapy including behavioral treatment, of several years of duration are most effective in treating autism. Moreover theses children can achieve good outcomes and report various levels of recovery from earlier autistic behaviors.

Romanczyk (1990, 1989) suggested that Challenging and maladaptive behavior is usually linked with autism. One of the recent domain themes in research in maladaptive behavior has been the recognition that such behavior can stem from the multitude of causes and that even the most severe and seemingly bizarre behavior patterns such as self injurious behavior, can be result of its functional value in individual's surrounding. In this connection several years ago Lovaas (1977) explained that very serious and dangerous behavior problems are found in autistic children and such problems impede greatly with learning and other significant activities of life. He suggested that aggression and self-injury are the most frequently occurring behaviors in children with autistic spectrum disorder. However, early intervention can open up unknown potential of autistic children that could later on label these children as high functioning.

Operant behaviors involve a wide range of behaviors, ranging from the very simple to the exceptionally complex. Skinner (1938) was the first to describe the effects of the consequences of a particular behavior on the future occurrence of that behaviour.

There are four types of Operant conditioning:

- Positive Reinforcement
- Negative Reinforcement
- Punishment, and
- Extinction.

It is evident from the review of literature that behavior modification with the help of behavior therapy proves very effective in case of autistic children. Each and every technique has its own importance in treatment of maladaptive behavior and development of adaptive behavior in these children. According to Maurice (1993) applied behavior analysis techniques (positive and negative reinforcement, extinction and punishment etc.) have proven effective for improving a wide range of skills in autistic children. Studies further showed amazing improvements in other specific important areas like peer interactions and classroom behavior (Strain, Hoyson & Jamieson, 1986), and imitation (Young et al., 1994).

Previous researchers have given much emphasis on the application of rewards and punishments techniques for getting better results by teaching practical skills to autistic individual so that they can enhance their functioning in the community through out the life span (Smith, 1989; Horner, Dunlap, & Koegel, 1988; Strain, Jamieson, & Hoyson, 1986). According to Dunlap, Jhonson, and Robbins (1990) the best approach of choice in dealing with behavior problems of all types in autistic children is to teach functional skills at an early age.

Positive reinforcement techniques, such as offering food or favourite toys for appropriate behavior or language responses, can (sometimes) be used successfully in promoting skills development and controlling abnormal behaviour (Lovaas et al., 1973). Working with autistic children is very difficult due to the essential factor of motivation (Fischer & Gochros, 1975). Thus the therapists typically must resort to food, drink or even pain as motivators. However, there are the obvious limitations to the utility of such reinforces while doing behavioral techniques. One of them is satiation (Egel et al., 1981). Many researches were conducted with the focus on the effectiveness of edible reinforcers with autistic children (Hatt, 1975).

The rationale of the present research is to estimate the individual and comparative efficacy of techniques of positive and negative reinforcement to reduce maladaptive behavior and to increase the adaptive behavior in autistic children. The best thing in behavioral intervention is it's simplicity and implementation in natural settings. Further as the multidimensional nature of autistic disorder has not gained the required awareness in Pakistan due to which there is limited body of the knowledge available regarding the behavioral treatment outcomes. This disorder has been labeled as having no cure. Present research also would give different dimensions not only towards the understanding of the disorder but also regarding the treatment implications for the maladaptive behavior prevalent in this disorder.

In the light of above mentioned literature following hypotheses were framed:

1) Treatment with positive reinforcement will increase the desired behavior of the autistic children as compared to that of autistic children with no treatment.

2) Treatment with negative reinforcement will increase the desired behavior of the Autistic children as compared to that of autistic children with no treatment.

3) Treatment with positive reinforcement will be more effective then treatment with negative reinforcement.

METHOD

Sample

Sample of the present research consists of 120 children (56 girls and 64 boys) selected through time sampling method. These children were diagnosed tentatively with Autistic disorder on Axis I of DSM-IV-TR (APA, 2000). They were referred from different private and public institutes of special education and Institute of Clinical Psychology, University of Karachi (Pakistan) to the Clinical Psychology Department of Ms-Ayesha Memorial Centre. Their age ranged from 6 to 12 years. They all belonged to lower middle, middle and upper middle socio-economic classes. For research purpose the sample was divided into three groups (two treatment groups and one control group) as follows:

Groups	Treatment Groups				Control Group	
	Group A (Positive Reinforcement)		Group B (Negative Reinforcement)		Group C (No treatment)	
N=120	N=40		N=40		N=40	
	Boys	Girls	Boys	Girls	Boys	Girls
Gender	20	20	25	15	19	21

Procedure

After taking the consent of parents and teachers, the whole procedure was conducted in the following sequential order:

Sample Selection Procedure

The technique of purposive sampling was used to select autistic children. The autistic children were diagnosed formally on Childhood Autism Rating scale (CARS) developed by Schopler, Reichler, and Renner (1986) with specified degree of disorder i.e. "mild", "moderate" or "severe".

Each child was assessed to confirm the display of any one of the three target behaviors (hitting, crying and non-compliance). Each child was decided to be placed either in one of the groups in this order, first in group A (Children who were supposed to be given Positive Reinforcement, for not displaying target behavior), second in group B (Children who were supposed to be given Negative Reinforcement after the display of target behavior), and third in group C (Children who were supposed to be kept untreated even on displaying the target behavior), fourth again in group A.

Treatment Procedure

Treatment procedure involved the following steps:

1-Selection of Reinforcer

The target behavior was analyzed in detail concerning its causes, and frequency through the administration of Motivation Assessment Schedule (MAS) developed by Durand (1990). The positive and negative reinforcers were decided on the basis of information gathered by the scale as a) Sensory reinforcer; b) Escape reinforcer; c) Attention reinforcer; d) Tangible reinforcer

	Sensory	*Escape*	*Attention*	*Tangible*
Positive Reinforcement (given when target was not displayed for ten minutes)	Giving an Object for sensory Stimulation	Giving a break from the continued activity	Giving Verbal and Physical Praise and appreciation	Giving a playing object or eating item
Negative Reinforcement (given shortly after target behavior was displayed)	Immediate discontinuation of the favourite activity or taking av of a favourite object by giving child a break on display of targe behavior. The activity is started after five minutes			

The record of occurrence of target behaviors before and after the implementation of 30 sessions was taken carefully. Behavior was observed as either reduction or elimination of hitting, crying and non-compliance in all groups.

Description of Measures

Childhood Autism Rating Scale (CARS; Schopler, Reichler, & Renner, 1986)

The childhood autism rating scale is 14 -item questionnaire that describes the autistic characteristics with different degrees. It is based on observable behavior. This scale gives four-point scale from existence of no symptom to severe one.

Motivation Assessment Scale (MAS; Durand, 1990)

This scale is designed to identify those situations in which the child is likely to behave in certain ways. It gives the information regarding the motivation of each child behind the maladaptive behavior. From this information, more informed decisions can be made concerning the selection of appropriate reinforcers and treatments.

Observation Recording Sheet

A recording sheet was prepared to record the multiple informations, during one hour of treatment. It included its frequency (as raw score) of behavior displayed and all other individual information of the child.

RESULTS

Table 1
Mean scores of reduction in the maladaptive behavior in Group A (given positive reinforcement) and group C (no treatment)

Groups	*N*	*M*	*SD*	*SEM*	*t*	sig.
Positive Reinforcement	40	3.9000	1.4212	.2247	-8.395	.000
No Treatment	40	.5000	1.3205	.2088		

(df=78, p<.002)

Table 2
Mean scores of reduction in the maladaptive behavior in Group B (given positive reinforcement) and group C (no treatment)

Groups	*N*	*M*	*SD*	*SEM*	*t*	sig.
Negative Reinforcement	40	3.0750	1.3550	.2142	-11.366	.000
No Treatment	40	.5000	1.3205	.2088		

(df=78, p<.000)

Table 3
Mean scores of reduction in the maladaptive behavior in Group A (given positive reinforcement) and group B (given negative reinforcement)

Groups	*N*	*M*	*SD*	*SEM*	*t*	*sig.*
Positive Reinforcement	40	3.9000	1.4212	.2247	-2.65	.01
Negative Reinforcement	40	3.0750	1.3550	.2142		

(df=78, p<.000)

Table 4
Comparison of positive reinforcement group with negative reinforcement group and no treatment group.

Groups	*SS*	*df*	*MS*	*F*	*sig*
Between Groups	251.617	2	125.808	67.405	.000
Within Groups	218.375	117	1.866		
Total	469.992	119			

Table 5
Occurrence of target behavior among autistic children

Behavior	Total number of Children	Percentage
Hitting	44	36%
Non-compliance	62	51%
Crying	14	11%

Table 6
Highest score of Autistic Children on variables of Motivation Assessment Scale

Variables	Total number of Children	Percentage
Sensory	54	45%
Escape	26	21%
Attention	30	25%
Tangible	10	8%

DISCUSSION

It is clear from table 1 that positive reinforcement is effective in the reduction of maladaptive behavior in autistic children as compared to no treatment whereas the difference was significant at (t=8.395, df=78, p<.000). Previously several western researchers have shown the effectiveness of behavioral therapy over other therapeutic techniques to treat autistic children (Birnbrauer & Leach, 1993; Maurice, 1993; McEachin et al., 1993; Smith, 199; Harris et al., 1991). Studies that were aimed to reduce self injurious behavior by positive and negative reinforcement techniques indicated the fact that these behaviors are usually maintained by sensory stimulation, attention from others, and the termination of events like requests or demands, or combination of these (Green & Cuvo, 1993; Iwata et al., 1987; Mason, 1990; Rapp & Singh, 1990; Taylor & Carr, 1992, 1994).

One important aspect concerning the present research is that the procedure used for positive reinforcement was behavior contingent that increased its effectiveness. As suggested by Vollmer et al. (1993) that behavior-contingent procedures are easier to implement, are less time-intensive, and are more useful for direct-care providers. Also, because the management of non-contingent reinforcement is not linked to response rate, it could be more therapeutically effective with high-frequency challenging behaviors.

Another fact that has promoted the success of positive reinforcement over no treatment is preference of child's selection for object as a positive reinforcer. Since the past decade, there has been an emphasis on the development of more empirical methods of stimulus preference assessment (Leatherby et al., 1992). In routine play, the child does not always get the chosen object to play or keep with him (as is one of the habits of autistic children). Autistic children in their limited and restricted world have their own preferences regardless of their effectiveness and social values.

The effectiveness of negative reinforcement as a treatment technique of behavior therapy in reducing maladaptive behavior as compared to no treatment provided has been supported by data (t= -11.366, df=78, p<.000). It has been observed that tantrums and self-destructive behaviors are generally aversive to an adult audience, they are relatively frequent in the autistic child's repertoire. Most autistic behaviors depend on an aversive effect of the listener for their reinforcement. To the extent that social behavior is not present at all, its major mode is through the production of stimuli or situations that are aversive enough so that the relevant audience will escape or avoid the aversive stimulus (often with a reinforcer) in normal day routine. That might be one of the reasons of success of negative reinforcement over no treatment.

In the present research an appropriate structured conditions were created to observe the efficacy of negative reinforcement while dealing with maladaptive behavior in autistic children. The main task of the structured environmental manipulation was

proper use of negative reinforcement. There is evidence that much of the behaviors of the autistic child are operant that is, controlled by its consequence in the social environment. The changes in the reinforcement contingencies of the environment produce much larger reaction in the autistic than in the normal child. Consequently, the environmental conditions are to be changed very slowly, so that the frequency of reinforcement remained high at each stage of the experiment.

It has already been discussed that the children with autism, have restricted pattern of interests and behavior. They generally do not like to be forced to do another activity that they don't like regardless of the demands of situation or social norms. Most of the time they like to busy by themselves and have less chances of allowing any outside social interference and interaction. The variables taken for present study are basically found more influential or effective because of its importance and uniqueness to each child. The activity as a reinforcer they like to be engaged throughout is the best thing they want to sustain their isolation with others. Kodak (2003) in a study evaluated the effects of noncontingent escape and differential negative reinforcement of other behavior in reducing problem behaviors and increasing compliance in 2 children with disabilities. Results showed that both methods were equally effective with autistic children.

It is evident from the statistical analysis (table 3) that children treated with the technique of positive reinforcement score higher as compared to children treated with negative reinforcement (t= 2.65, df= 78, p< .05). Besides of efficacy of both methods, their comparison reveals some important aspects. First the positive and negative reinforcement frequently operate in concurrently and many times, it is difficult to see a difference in their application. To illustrate, when a parent is confronted with a screaming child who wants a toy, the presentation of that object will positively reinforce the agitated behavior (i.e., the child learns to scream because it produces a desirable consequence) and, in turn, the response by the parent will be negatively reinforced (i.e., it results in the child being quiet). It has been noted that in many clinical setting psychotherapist used both negative and positive reinforcement techniques.

It has been observed during data collection that when the child performed as a conditioned aversive stimulus for the other person, the person is less likely to reinforce the child's behavior positively. This lack of positive reinforcement, in turn, emphasizes the autistic responses on the child's part as the major mode of affecting the others around. That is differentiating from the condition when no treatment is being offered. As Fisher et al. (2005) compared the relative effects of positive and negative reinforcement. Results suggested that for one participant the value of the positive reinforcer overrode the value of the negative reinforcer, whereas for the other participant, the presence of the positive reinforcer in the demand context lessened the aversiveness of the demands. Piazza et al. (2003) studied the effects of relative reinforcement with three clients whose destructive behavior was sensitive to negative reinforcement (break from tasks) and positive reinforcement (access to tangible items, attention, or both). The results of

functional analyses suggested that the destructive behavior of two individuals was sensitive to escape (negative) and attention (positive) as reinforcement.

In clinical practice, positive reinforcement method far exceeds the application of negative reinforcement procedures. This finding can be explained because as noted previously, negative reinforcement operates by programming non-preferred stimulation that either can be avoided or terminated dependent on a target response.

The success of positive reinforcement over negative reinforcement involves several factors as has been observed during the research process. One of them is the reward that an autistic child achieved in the form of positive reinforcement has a great value for him. In case of negative reinforcement a child tries to escape from or avoid the object or situation he does not prefer usually leads to the feelings of discomfort for the child. As it was mentioned earlier that the behavior techniques consisted of simple and one to one step procedure, i.e. as the child displays the target behavior he/she is given appropriate reinforcement. This procedure is simple and easy to understand by children. As a result they usually respond to these techniques more positively, no matter what nature and intensity of disorder they have.

In the present study during the implementation of behavioral treatment procedures, only one target behavior was selected, so it was easier to focus on the treatment of that particular behavior as compared to the situation if research would focus on more target behavior. The intensity or severity of that behavior is treated only, even it takes longer period.

The discussion above has indicated the applicability of Behavior therapy techniques in the treatment of maladaptive behaviors in autistic children. The techniques of positive and negative reinforcement have been found effective with autistic children to reduce the maladaptive behavior and as a result to increase the adaptive behaviour. It has been observed that effectiveness of investigation procedures have various reasons. These reasons include simplicity, individualized implementation, considerations and modification according to the requirements of each child. To make any treatment effective focus should be on the flexibility (can be change according to the problem of client), consistency (use on regular basis) and implementation (can be implement at school, institute and home at the same time) of the techniques applying for any psychological problem. It is also concluded that behavioural program for autistic children can be more beneficial if it incorporate training ad support for parents and caregivers.

While conducting the research many demographic variables were not controlled (socio-economic level, educational opportunities provided to the child etc.), as they can have significant effect on treatment gains. The study was limited to the application of therapeutic technique in clinical settings and did not include the generalization of treatment gains. There should be an additional step of confirming and facilitating the treatment gains to be lasting for longer period of time.

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POST HOC ANALYSIS OF X^2 DATA

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ABSTRACT

It is advisable to go beyond the overall consequence estimate in order to pinpoint both within and without differences

Karl Pearson (1900) introduced the chi-square (X^2) statistic. X^2 is a frequency-based statistic. It serves two purposes: (i) it tests whether or not a significant difference exists between observed number of cases and expected number of cases specified by the null hypothesis, and (ii) it tests whether or not there is an association between two or more variables. In both cases the same X^2 formula $\sum (fo-fe)^2/fe$ is used, and researcher gets an overall estimate in both cases.ANOVA (F) yields an overall estimate of sample means. Provided F is significant, attempt is made to pinpoint which pair AB, AC, or BC, differs, and which does not differ between themselves and within themselves. Such an attempt is called post hoc analysis. Scheffe (1953) and Tukey (1953) statistics are widely used post hoc statistics. Unlike F, authors of text books especially designed for behavioral sciences as well as researchers have not gone beyond the overall result of X^2 test. We, here, attempt to use X^2 for two more possible points of difference i.e., within difference and between differences. Illustrative examples are given below both for the measure of goodness of fit and for the measure of association between variables.

I. Measure of goodness of fit

Responses of students to a question.
"Does diet improve health"?

		Yes(A)	No(B)	?(C)	
Students (N=60)	fo	30	18	12	
	fe	20	20	20	
$X^2 = \sum(fo-fe)^2/fe =$		5	0.2	3.2	=8.4
$df = 2, p = .02$					

This is an example of one-way X^2. Since X^2, is significant, attempt is made here to pinpoint which pair AB, AC, or BC significantly differs and which does not differ within themselves.

(i)Pair AB (i.e. Yes and No responses)

	fo	fe	$(fo-fe)^2/fe$
A	30	24	1.5
B	18	24	1.5

$X^2 = 3.0$, df=1, Insig

(ii)Pair AC (i.e. Yes and ? responses)

	fo	fe	$(fo-fe)^2/fe$
A	30	21	3.857
C	12	21	3.857

$X^2 = 7.714$, df=1, $p < .01$

(iii)Pair BC (i.e. No and ? responses)

	fo	fe	$(fo-fe)^2/fe$
B	18	15	0.6
C	12	15	0.6

$X^2 = 1.2$, df=1, Insig

Pairwise differences show that pair AC only differs within themselves, whereas others do not differ.

1. Measure of association between Variables (i.e., genders and personality styles)

	Type A	Type B	Total
Men	50	25	75
Women	30	45	75

$X^2 = 10.71$, df=1, p=.001

This is a 2x2 X^2 table. The overall X^2 estimate of association between variables shows that there is a gender difference in terms of personality styles.

In terms of within difference among men and women samples, X^2 estimate is given below:

		fo	fe	(fo-fe)²/fe
Men	Type A	50	37.5	4.167
	Type B	25	37.5	4.167

X^2= 8.334, df=1, p<.01

The X^2 value shows that men differ within themselves in terms of their personality styles.

		fo	fe	(fo-fe)²/fe
Women	Type A	30	37.5	1.5
	Type B	45	37.5	1.5

X^2= 3.0, df=1, Insig.

The X^2 Value shows that women do not differ within themselves in terms of their personality styles.

The X^2 estimate of the gender differences is given below:

		fo	fe	(fo-fe)²/fe
Men	Type A	50	40	2.5
Women	Type A	30	40	2.5

X^2= 5.0, df=1, p= .04

Men and Women significantly differ between themselves in their Type A behavioral pattern.

		fo	fe	(fo-fe)²/fe
Men	Type B	25	35	2.857
Women	Type B	45	35	2.857

X^2= 5.714, df=1, p .02

Here, men and women significantly differ to each other in their Type B behavioral pattern also.

In gist, if overall X^2 estimate reaches a statistically significant level, one is advised to go ahead to work out both within and between differences. The within and between differences suggest, here, that data are like a lemon, the more you reasonably squeeze it the more juice (information) you get.

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NON -INJECTABLE USE OF HEROIN: PATTERNS AND DEMOGRAPHIC CHARACTERISTICS OF ADDICTS IN KARACHI, PAKISTAN

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ABSTRACT

Current descriptive study on heroin addiction in Karachi, Pakistan is conducted to explore the patterns and socio-demographic characteristics of male addicts who belong to lower socioeconomic status. The sample of 100 heroin addicts was taken from two treatment centers of Karachi who are providing free of cost treatments. Detailed interviews were conducted according to the form developed by researchers and then this information was confirmed from the record of the treatment centers. Means, standard deviations and percentages were calculated by using SPSS (V.12). The results indicate that mean age of the sample was 36.41(range=21-68 yrs.), 42% of addicts initiated drugs during the age of 16-20 years, Majority of them had gotten education till middle (34%) and 41% of addicts were middle born. 54% were married, 77% belonged to Joint family structure, 78% were employed, 92% had monthly income of less than 14000 Rs., 53% depend upon wage or salary. 17% reported the presence of a drug user in the family. Mean of total duration of drug use was 16.90 years (range=1-41 yrs.). Mean duration of Heroin use of our sample was 13.12 years (range=1-25 yrs.), majority (69%) of the sample use Heroin by smoking, reason for initiation of Drug use was found to be the friends and peer groups influences (57%), 80% were admitted in Rehabilitation centres for one to ten treatments in the past and 40% reported criminal history.

INTRODUCTION

Addiction is considered as a chronic disorder, which is characterized by compulsive use of substance resulting in physical, psychological and social harm to the user. Despite this, addict person continues to use that substance, which means that addiction is a psychological and behavioral syndrome (Rinaldi, Steindler, Wilford, & Goodwin, 1998). Drug addiction has been prevalent in South-East Asian countries since the 1970s (Spencer & Navaratnam, 1981). Mean while heroin addiction has been extensively studied in the Western countries (Bewley, 1968; Kosviner etal., 1968). In South-East Asia studies have been conducted related to drug abuse, dependence and prevalence in 1980's (Spencer & Navaratnam, 1981; Abaree, 1983). Most recent estimates from Pakistan have scientifically calculated 500,000 chronic heroin users nationwide, with a sizeable proportion of drug users altering their drug route preferences from non-inject able forms to injection use of synthetic drugs (United Nations Office on Drug Control; UNODC; 2000).

Cognitive variables such as self-reported motivations or reasons for substance use have important intervention implications given their high correlations with actual substance use and the fact that they may differentiate type of substance used, frequency of use, age of user, and stage of use (initiation vs. maintenance) (Baumrind, 1990) .

Decrease in the age of initiation to drug use, including heroin use, across birth cohorts has been documented in both Australia (Lynskey & Hall, 1998; Degenhardt, Lynskey, & Hall, 2000) and the United States (Johnston & Gerstein, 1998). This decrease in the age of heroin initiation has been associated with greater poly drug use, unintentional overdose and criminal behavior, independent of years of heroin use (Lynskey & Hall, 1998). According to a recent study in Iran, 46% of addict population were 25 to 34 years old while another study reported that 44.7% of addicts were 20-29 years old (Ghoreishizadeh & Torabi, 2002; Ghashlaghi , 2003).

Mode of drug use is considered to play an important role. Research on the use of nicotine among heroin and cocaine addicts strongly indicates that cravings for nicotine are related to increased cravings for heroin and cocaine and may be triggers for relapse (National Institute of Drug Abuse; NIDA, 2000).

Substance use disorder is a chronic condition of unknown etiology (Maddux & Desmond, 1981) characterized by abstinence and relapses. Treatment must be initiated early. This saves lives, reduces criminal activity, improves social functioning and enhances the quality of life of the individual (Nurco, Ball, & Shaffer, 1985). The longer the treatment the better the outcome (Simpson & Sells, 1982). Providing treatment to substance abusers is not easy (Hubbard, Marsden, Rachal et al., 1989). Studies show that many never request any help (Pickens & Fletcher, 1991), their retention in treatment

programs is low (Hubbard, Marsden, Rachal et al., 1989; O'Brien et al., 1987), and the relapse rate after discharge is high (Hubbard & Marsden, 1986).

Empirical evidence (DeLeon, Melnick, & Kressel, 1997) as well as clinical observation indicates that internal dynamic characteristics of the addicted person (such as attitudes toward drug use and motivation for treatment) may be as important as background or socioeconomic factors in predicting abstinence and relapse. Thus the study is an endeavor to report the clinical, personal and socio demographic characteristics of the participants of the study. This will help to explore the trends as they emerge in the population of addicts as well as to rule out any possible factors involved in drug addiction, for future research.

METHOD

Sample

The sample was drawn from the two treatment centers (New Horizon and Dar-ul-Nijat) of Karachi. It consisted of 100 male heroin addicts belonging to low socioeconomic status. Only those registered male heroin addicts were included from these treatment centers who were diagnosed as having Heroin dependence/ Abuse disorder (Opioid related disorder) of DSM-IV TR (American Psychiatric Association, 2000), and were getting treatment. The entire sample comprised of adult heroin addicts who have never used injectable mode of addiction.

Measures

Interview Form for Clinical, Personal and Socio-demographic Information: Information was obtained through items which focused on the subject's age, education, birth order, marital status, socioeconomic status, age and reason of drug initiation, type and mode of drug with respect to the progression of drug and dosis, presence of any other drug user in family, history of imprisonment or accused and total number of treatments, how, why and when did they start taking heroin. Did they know the effects of heroin when they shifted to heroin intake? And what is their current knowledge about the effects? Any significant event they want to describe related to addiction etc.

Procedure

A letter of consent describing the research project and inviting participation was provided to the administration of treatment centers, along with the questionnaires. Those subjects who fulfilled the research criteria were approached at their Narcotic Anonymous meeting days at their Out Reach/drop-in or sub branch centers and at their work place (treatment centers). The subjects were instructed that if they wish to participate they should spare some time after their Narcotic Anonymous meeting and sign the consent

form. Before the administration of Interview form for clinical, personal and socio-demographic information the researcher established the rapport and briefed the subjects about the purpose of the interview. Researchers interviewed the subjects and took brief history regarding heroin intake and their status of knowledge regarding its effects was also conducted. After taking information from the subjects, it was verified by their personal record forms of the centers.

RESULTS

Table 1
Descriptive Statistics of Age in entire Sample (N=100)

Age (Years)		%
21-30		31
31-40		41
41-50		22
51-60		4
61-70		2
	Minimum	21
	Maximum	68
	M	36.41
	SD	8.57

Table 2
Percentages of different Educational Levels in entire sample (N=100)

Education		%
Primary	5 years	12
Middle	8 years	34
Matriculation	10 years	26
Intermediate	12 years	15
Graduate	14 years	11
Masters	16 years	2

Table 3
Birth Order in entire sample (N=100)

Birth Order	%
First born	26
Middle born	41
Last Born	23

Table 4

Frequencies and Percentages of Marital Status in entire sample (N=100)

Marital Status	%
Married	54
Single	26
Widowed/Separated/ Divorced	20

Table 5

Frequencies and Percentages of different Family Structures in entire sample (N=100)

Family Structure	%
Nuclear	23
Joint / Extended	77

Table 6

Frequencies and Percentages of Employment Status in entire sample (N=100)

Employment Status	%
Employed	78
Un employed	22

Table 7

Income Groups in entire sample (N=100)

Income Groups	%
Less than 14000	92
14000-30000	6
More than 30000	2
Minimum	1000
Maximum	450000

Table 8

Financial Resources in entire sample (N=100)

Financial Resources	%
Wage/Salary	53
Family/Partner	25
Friends	0
Business	21
Selling Drugs	0
Benefits/Pension	1

Table 9

Age of Initiation of drug use in entire sample (N=100)

Age		%
5-10 years		4
11-15 years		24
16-20 years		42
21-25 years		17
26-30 years		8
31-35 years		4
36-40 years		0
41-45 years		0
46-50 years		1
	Minimum	10
	Maximum	48
	M	18.8900
	SD	6.0983

Table 10

Reasons for Initiation of drugs in entire sample (N=100)

Reason for Initiation Drugs	%
Curiosity	4
Have Fun	5
Peer Pressure	57
Sexual problems	9
Pleasure	1
Escape	8
Frustration	8
Availability	8

Table 11

Total Duration of drug use in entire sample (N=100)

Duration of drug use		%
1- 10 year		23
11- 20 year		45
21- 30 year		30
31- 40 year		1
41-50 years		1
	Minimum	1
	Maximum	41
	M	16.9000
	SD	7.5525

Table 12

Duration of Heroin use in entire sample (N=100)

Duration of Heroin use		%
1-5 year		17
6-10 years		22
11-15 years		23
16-20 years		30
21-25 years		8
	Minimum	1
	Maximum	23
	M	13.1200
	SD	6.2479

Table 13

Drug user in Family or Friends in entire sample (N=100)

Drug user in family or friend	%
Yes	17
No	83

Table 14

History of Imprisonment in entire sample (N=100)

History of Imprisonment	%
Yes	40
No	60

Table 15

Frequencies and Percentages of Number of Admission in Rehabilitation Centers for Treatment in entire sample (N=100)

Number of Admission for treatment		%
First admission		17
1-10 times		80
11- 20 times		3
	Minimum	1
	Maximum	19
	M	2.590

Table 16
Frequencies and Percentages of Mode of Heroin use in entire sample (N=100)

Mode of Heroin use	%
Smoke	69
Sniff	31

DISCUSSION

Heroin addiction is a complex disease, which has intervening biological, psychological and social effects. The causes of drug addiction are still unclear. Rather than finding one single determinant, scientists have identified a number of biological, psychological, and social/cultural preconditions as precursors of addiction (Gordon, 2001). Carroll (1999) noted that "in human situations where non drug activities and rewards are extremely limited, such as in war zones, prisons, homeless camps, and low-income, inner-city life, the rate of drug abuse is quite high."

Besides these internal dynamic characteristics, the environment and its associated factors determine the severity of problems in person's life and also determine his coping responses toward these stressors. Similarly there are numerous environmental and personal factors related to addiction and person's response toward treatment. Present study thus was also an endeavor to explore few of these related variables, as they occur in the sample of the study.

This study confirms some of the trends found in the researches done in west as well as in the region of south East Asia, on opiate abusers. Some of the studies conducted in Pakistan also yield highly consistent results related to socio demographic of Heroin addicts e.g., social, economical and cultural factor (Mufti et al., 2004; Emmanual, Akbar & Rahber, 2003; Aziz & Shah, 1995).

The present study shows varied patterns for age distribution. Besides the findings of Mufti et al. (2004), indicating that in Pakistan 39% of the heroin addicts in Pakistan fall in the age range of 31-40 years, present research also finds that the distribution of sample for age has similar presentation. Majority of the heroin addicts in the present study are falling in the age range of 31-40 years (41 %) with the mean age of 36.41 years (Table 1), which is relatively older age group with other reports from the world; including Iran (Gheshlaghi, 2003), and United States (Tucker, 2000).

The other demographic properties of the sample including education, birth order, family structure as well as marital status were also explored. Out of total number of heroin addicts (N=100), majority of data had done Middle (34%) with only 26% of individuals receiving education up till Matriculation (Table 2), which was consistent with the findings of Australian study of 398 heroin addicts which reported 83% of participants

attending secondary school (Day, Ross, Dietze, & Dolan, 2005). 41% of our participants were middle born (Table 3), while the most prevalent marital status of participants (54%) was married (Table 4) and a large number of participants were living in joint family structure (77%)(Table 5). In terms of marital status and family structure results are consistent with other studies conducted in Pakistan (e.g., Mufti, 2004). Heroin addicts who are married and live in joint family structure have more chances to approach treatment centers due to the pressure of their family. A study conducted by Phillips (2005) has also shown that Opioid users were availing treatment because of family pressure (36%).

Unemployment and social deprivation are associated with the increased use of heroin, although any direct causal link has not been established. Our results reveal that 78% of addicts were employed (Table 6) with less than Rs.14000 (92%) average monthly income (Table 7). A large number of the sample (53%) earns their living by doing jobs either on daily wages or monthly salary (Table 8). The results are surprising; however, it should not be overlooked that besides unemployment, the growing needs of an individual with very low salary also result in frustrating and invoke sense of deprivation and helplessness in him.

According to Hesse (1994) early initiation of drug use is one of the best predictors of future drug abuse and dependence. While the most common age of initiation of drug use is 15-18 years, achieving peak during the senior year in high school or in college (age 17 to 23), the individuals whose drug use started before high school (age 14 or younger) are more vulnerable to drug problems later in life than those who started using drugs in high school or college. Day, Ross, Dietze, and Dolan (2005) reported the mean age at first heroin use as 19 years (SD 6.0, range 9-43 years) for his sample, which is consistent with the findings of present research. In our study the most prevalent age of initiation is during 16-20 years (42%) (Table 9) with the mean age of 18.8 years. A large number of individuals are taking drugs from 11-20 years (45%) (Table 11), while 30 % are taking heroin from 16-20 years (Table 12). The statistics reflect the trends of growing drug use with the devastating effects on a person's life. The history of long drug use is indicative of the inability of individuals to get rid of the evil despite of number of treatments. In the present study 80% of the participants had been admitted in rehabilitation centres for treatment for 1-10 times (Table 15). The early initiation onset leads toward longer duration of drug use. According to Lynskey and Hall (1998), younger age of initiation to heroin use was found to be associated with poly drug use; overdose and crime after the effects of duration of heroin use had been statistically controlled. These findings suggest that there has been both an increase in the willingness of young people to experiment with heroin and an increased availability of the drug over this time.

According to Gillis and Mubbashar (1995) there are similar high risk factors found in Pakistan and in United States. Among those factors are easy availability of drugs

and the social inducements to use them while lacking bonds with societal institutions or value systems which might mitigate against drug use. How ever, in present study the factor of easy availability of drugs (that was one of the reasons of initiating drugs) was not found in more than 8 % of the participants. Most powerful factor that has emerged as the reason of initiating and continuing drugs was the factor of peer pressure (57 %) (Table 10). This result is found consistent with the studies conducted at Peshawar and Lahore (Mufti, et al, 2004; Azir & Shah, 1995). Five year follow up study of Heroin addicts at Peshawar (Mufti et al., 2004) revealed that most of the clients were introduced to drugs through friends and the comparative study of Azir and Shah (1995) indicates that Addicts were under greater peer influence and had more deviant and drug-using friends than the non addicts.

Emmanuel, Akhtar, and Rahbar (2003) reported in their study that the presence of drug user in family was found in 95 % of the participants and in another study (Mufti et al., 2004) it was 32 % however, present study found only 17 % of the heroin addicts having another drug user in the family (Table 13). Besides family history of drug use 40% of the participants reported history of imprisonment (Table 14), however, they were indulged in minor crimes. Theft is the means by which most street addicts obtain money to buy heroin and therefore is an inevitable consequence for addiction. For the majority this is the only way they can support an expensive heroin habit. The crime statistic shows both the force of drug hunger and its specificity: almost all the crimes committed by addicts relate to the procurement of drugs. The rapid disappearance of theft and antisocial behavior in patient on the methadone maintenance program strongly supports the hypothesis that the crimes that they had previously committed as addicts were a consequence of drug hunger, not the expression of some more basic psychopathology. The so-called sociopathic personality is no longer evident in our patients (Dole & Nyswander, 1967). Heroin addicts must find money to support their habit and most addicts steal in order to raise money to enable them to continue their drug abuse. However, heroin addiction tends to be associated with less violence (Shafer, 1973).

Another important finding in our study is that major (69 %) method of drug intake was smoking (Table 16) and in the study of Mufti et al. (2004), it was 96% that is high risk factor of relapse. In a study (National Institute on Drug Abuse, 2000) it was concluded that nicotine it self increase craving and it trigger to relapse. Drugs in the region are mostly ingested orally; heroin is usually smoked or the smoke is inhaled (Drug Abuse Warning Network, 2007).

Limitations

Study design can be improved by adding more data and some other important elements e.g., Psychiatric co morbidity, Physical complaints and diseases, type of crimes.

More over this study focused on non inject able users but data related to drug addicts who use injection as mode of heroin intake could be also included in future research. Demographics related to street drug user will be highly useful to study. More over comparative study related to gender will also be useful.

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