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BODY IMAGE AS A DETERMINANT OF SELF ESTEEM AND DEPRESSION IN MARRIED FEMALES

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ABSTRACT

The present study investigates the relationship of body image with self esteem and depression among married females. After detailed literature review certain hypotheses have been formulated, i.e., (1) body image would be positively related to self esteem, (2) body image would be negatively related to depression. The sample of the present research consisted of 42 married females with an age range of 25-35 years and qualification of at least graduation. Body Image was measured with the Body Esteem Scale (Franzoi & Shields, 1984) and Self Esteem was measured using the Rosenberg Self Esteem Scale (Rosenberg, 1965), while Depression was measured using Center for Epidemiologic Studies of Depression scale (Radloff, 1977). Data analysis involved the use of Pearson Product Moment Correlation and the results show that there is a significant positive relationship between body image and self esteem, and insignificant negative relationship between body image and depression.

INTRODUCTION

The complex study of body image and body dissatisfaction has captured the attention of many researchers and clinicians as it appears related to core measures of well being such as self esteem and depression as well as clinical syndromes of anorexia nervosa and bulimia nervosa (e.g., Cash & Pruzinsky, 1990; Garner &

Garfinkel, 1981). College females judge their current figure to be significantly heavier than their ideal figure. Women more often overestimated their relative weight and rated their bodies as heavier than they thought men preferred as an ideal (Gray, 1977; Fallon & Rozin, 1985; Rozin & Fallon, 1988; Thompson & Psaltis, 1988). Nearly one half of North American women experience some degree of body image dissatisfaction (Cash & Henry, 1995). Cash (1998), found that women's body image has become poorer over the last three decades. Although body dissatisfaction does occur in men, it is much more common in women (Cash & Brown, 1989; Jackson, 1992; Smith, Thompson & Raczynski, 1999).

It was long assumed that body image was a unidimensional construct; recent research has suggested a multidimensional structure to body image. Rucker and Cash (1992) maintained that body image includes at least two components: perceptual body image (i.e., estimation of one's body size) and attitudinal body image (i.e., affective, cognitive, and behavioral concerns with one's body size).

Since feelings about one's self may be shaped by the attitudes of others, those who are overweight may suffer from low self-esteem and have high levels of depression (Ross, 1994). Body satisfaction or physical self esteem is closely associated with more global feelings of self esteem (Cash et al., 1986; Rosen & Ross, 1968; Secord & Jourard, 1953).

Negative body image can lead to eating disorders (Cash & Lavallee, 1997), depression, social-evaluative anxiety, sexual difficulties, and poor self-esteem (Cash, 1990). Perception of one's physical appearance has been consistently recognized to be the number one factor in predicting self-esteem (Harter, 2000).

Sheslow, Hassink, Wallace, and Delancey (1993) noted that obesity in adolescence may cause psychosocial problems, such as lowered self-esteem, depression, and difficulties with interpersonal relationships. A distorted perception of one's body is among the determinants of disturbances in self-esteem (Gardner et al., 1999). A more negative body image is related to lower self-esteem (Quinn, Semper, Jorgensen, & Skaggs, 1997). Wichstrom (1995) reported that perceived obesity is associated with depression and unstable self-perceptions in the general adolescent population in Norway.

Thompson and Thompson (1986) found a significantly negative correlation between self esteem and size overestimation, indicating that women with the

greatest overestimation had the lowest self esteem. Taylor and Cooper (1986) similarly found a strong association between depression and size overestimation, greater depression was paralleled by larger levels of inaccuracy. The proposition that there is a relationship between depression and body image disturbances has drawn from many theoretical perspectives, including the cognitive (Noles, Cash & Winstead, 1985) and the psychodynamic (Peto, 1972). Thompson and Psaltis (1988) found that size of current figure was positively correlated with depression and a history of being teased about physical appearance.

With regard to the general relationship between self esteem and the body image, a more positive self concept has been related to a slimmer physical build as measured by the Body Mass Index (BMI=height/weight, height in meters, weight in kilograms) (Young & Hemeley, 1996), which is a measure of relative fatness (Goldberg, Bailey, Lenart, & Koff, 1996). This indicates a link between self esteem and actual body build, but there is also extensive evidence that self esteem is positively related to body satisfaction (Hayes et al., 1999; Henriques & Calhoun, 1999; Mendelson & White, 1985; Russell, 2002).

In 1997, Cash, Winstead, and Janda renewed the massive three decade long investigation into the subject of body image. Approximately 2000 men and women that answered a query from Psychology Today were surveyed in detail regarding their opinions and feelings about their bodies. Thirty-eight percent said they were dissatisfied or very dissatisfied with their body image. Sixty-three percent of the women said they were afraid of becoming fat.

Obese women had a general, pervasively negative self-concept, felt more inhibited in discussing sex with partners, rated their primary relationships more unhappy, and compared their physical attractiveness negatively to that of other women around them. They frequently wished they could change some part of themselves, and felt that their weight frequently interfered with their relationships (Shapiro, 1980).

Stuart and Jacobson (1987) received 9,000 responses to a questionnaire about weight and sex. The book, Weight, Sex and Marriage, published as a result of this survey discusses the relationship of food and fat to many aspects of marriage and relationship, including sexuality. According to them:

"A majority of women, however, believe that changes in their attitudes were as important as the changes in their weight. Women reported greater sexual desire

and less sexual inhibition when they felt better about their bodies. This accounts for the fact that almost 60 percent of the women in our study have sex more often, and enjoy it more, after they lose weight.... Some (letters) were from the 40 percent of our sample who said their weight had no effect on their husbands' sexual interest, but it made all the difference in their own willingness to be sexual...."

While numerous investigators concur that culture plays a vital role in determining one's satisfaction with their body (e.g., Slade, 1988, 1994) few studies have been conducted that have examined people of color in Europe or North America and even fewer have studied people in Asian countries. In light of the gaps and confusion in the existent literature, the present study was designed to explore the relationship of body image, self-esteem and depression among married females.

METHOD

Sample

The sample of the present study consisted of 42 married females. Their ages ranged from 25-35 years, while their education level was at least Graduation.

Measures

(1) Body image was measured with the Body Esteem Scale (BES; Franzoi & Shields, 1984). The BES is a 35 item self report measure dealing with the degree of satisfaction among various body parts or processes. The items were scored on a 5-point likert scale with higher scores indicating greater body part satisfaction. The scale includes three subscales: physical attractiveness for males and sexual attractiveness for females (BES1), upper body strength for males and weight concern for females (BES2) and physical condition for both males and females (BES3).

(2) Self esteem was measured using the Rosenberg Self esteem scale (Rosenberg, 1965), which consists of 5 positively worded items and 5 negatively worded items. Each item is rated on a 5 point scale. Half of the self esteem items are reversely scored; that is, for these items a lower rating actually indicates a higher level of self esteem. Scores greater than 20 indicates generally positive attitudes toward the self, the scores below 20 indicate generlly negative self-attitudes.

(3) Depression: The level of depressive symptoms was measured using the 20-item Center for Epidemiologic Studies Depression Scale (CESD; Radloff, 1977), which consists of four dimensions: depressive affect, positive affect, somatic symptoms, and interpersonal relationships. Repondents were asked how often they have experienced each symptom in the last month: (0) rarely, (1) some of the time, (2) occasionally, (3) most of the time. Scores ranges from 0 to 60; the higher the score, the higher the occurrence of depressive symptoms. Respondents with scores of 16 or higher are regarded as probable cases of depression.

Procedure

Prior to the data collection, the purpose of the study was described, and consent was taken from the participants. Participants were assured of anonymity and confidentiality. They were required to complete the demographics regarding Name (i.e. optional), Age, Gender, Education, and Duration of marriage and then they were asked to respond on the scales of Body image, Self esteem and Depression.

Scoring

Scoring of Center for Epidemiologic Studies Depression Scale, Body Esteem and Self Esteem was done according to the standard scoring system given along with the scales.

Statistical Analysis

Statistical analysis was conducted using the SPSS program. Pearson Product Moment correlation was used to examine relationship between Body esteem and Self esteem, as well as between Body image and Depression.

Operational Definitions of Various Terms

Body image

Body image is an individual's psychological experience of the appearance and function of his/her body and is one aspect of an individual's mental representation of him/herself.

Self esteem

Self esteem is the level of global regard one has for the self, or how well a person "prizes, values, approves, or likes him or herself".

Depression

Generally a mood state characterized by a sense of inadequacy, a feeling of despondency, a decrease in activity or reactivity, pessimism, sadness and related symptoms.

RESULTS

Table I
Correlation of Body Image with Self Esteem and Depression

Variables	N	r	Significance Level
Depression	42	-0.061	P > 0.05
Self Esteem	42	0. 322	P< 0.05

DISCUSSION

As reflected from table I, there is significant positive correlation between body image and self esteem ($r = 0.322$, $p < 0.05$), which is indicative of the relationship's strength between these variables. Women who are dissatisfied with their bodies have lower body image and in turn there is decrease in their self esteem. For many women, self esteem becomes tied to weight and shape, and negative feelings about their body generalize to the entire self (McFarlane, McCabe, Jarry et al., 2001). People are affected in a very fundamental way by how they perceive their bodies and how they think others perceive them. This perception is related to societal standards and cultural concepts. If an individual feels basically unattractive unappealing, or in some way physically inferior, these self perceptions are likely to have a powerful effect on other areas of their lives (Raymond, 1984). Furnham, Badmin and Sneade (2002) studied, whether girls who are dissatisfied with their bodies have lower self-esteem. The study found that dissatisfaction with body image and weight was significantly correlated with low self esteem. In the present research findings, the results suggest that as body satisfaction increases, so does self esteem. For women of all ages, body image

takes on a disproportionately important role in the determination of self-esteem. When unrealistic goals are not met, feelings of failure contribute to further drop in self esteem and an increase in body image dissatisfaction.

There is insignificant relationship between body image and depression ($r = -0.061$, $p>0.05$), although it is not significant but it is negative, which shows that lower body esteem does not lead to depression. This is also supported by a research, in which Sarwer, Waddden and Foster (1998) found weaker relationship of body image dissatisfaction with depression and self esteem for non-obese women. Lower body esteem does not necessarily leads to depression.

Another reason for the insignificance of result might be that the sample of present study consisted of married females with an age range of 25-35 years. Researches indicate that the body dissatisfaction leading to depression is more prevalent among adolescents. For example, Moore (1988) reported that dissatisfaction with body weight and shape was highest among females aged 12 through 23 years. Furthermore since our sample included educated women it seems that although their self esteem was significantly related to their body images but not the extent of leading them towards depression. Body image was not a strong predictor of depression, as educated females might have better coping skills making them less prone to depression.

The results of this study have implications for health education. Health care providers need to teach females about their weight range, and how to maintain it through appropriate diet and exercise and to attain a realistic, positive perception of their weight in order to prevent depression and lowered self esteem. Further study is needed to determine the effect of perception of weight problem on weight control behaviors among females. Further research comparing female and male individuals is needed not only for theorizing but also to potentially advance understanding about the development and prevention of body image disturbances. Comparisions can also be made among educated and uneducated individuals.

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OPINION BASED SURVEY: PREVALENCE, ASSOCIATED FACTORS AND REMEDIAL PLANNING FOR ACADEMIC DISHONESTY

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ABSTRACT

The survey is based upon the prevalent views of students regarding academic dishonesty. It was planned to investigate the prevalence of cheating in males and females, and explore the commonly used cheating methods; personality traits; responsible sources and also look forward to suggestions to control this growing menace in varying degrees and forms. The data was obtained from 60 males and 60 females belonging to first, second and third division/failures group (20 in each) by using a questionnaire and was analyzed mainly on the basis of percentage differences in males and females on different dimensions of academic dishonesty. The chi-square was applied to see the significant difference in the cheating prevalence in males and females and the result was found to be significant ($P < 0.001$). Most commonly used cheating method came out to be that of crib notes; and cancellation of paper (31%) was suggested by males and suspension (28%) was suggested by females as a punishment for those who cheat.

INTRODUCTION

Value system holds a very important place in a person's life. It reflects on how the individual will progress through life dealing with different situations that would come on his or her way. Most importantly, value system defines a person perception of what is wrong and what is right and how far is he or she willing to compromise on this. Values can be considered as affectively-laden thoughts about objects, ideas and / or behavior that guide behavior, but do not necessarily require it (Rokeach, 1973). Over the past few years man has witnessed

deterioration in value system in nearly all the fields of life. Strictly speaking one area where this demoralization goes unnoticed is in the educational institutes.

Demoralization in any educational institute can take the form of academic dishonesty, commonly known as 'cheating'. Cheating is when a person misleads, deceives, or acts dishonestly on purpose. Cheating may happen at school, at home, or while playing a sport. However, academic dishonesty or simply speaking cheating in school refers to the use of unfair means (minor or major) to pass an exam, assignment, home work and / or class test. In academics, in addition to cheating on a test, stealing someone else's idea for any project or copying material off the internet or from a book and presenting it as one's own original work is considered cheating as well. This particular form of cheating is called plagiarizing. Like any other unethical work cheating is tempting, for many it makes life easier. Who would not want to get A grade with little or no hard work or save time and energy and copy some one else's hard work? Cheating for many students can be a thrill and for many it is the last resort for success.

The research interest in cheating began with the work of Bowers in early 1960s when he surveyed more than 5,000 undergraduate students at 99 different institutions. He found that three out of four students admitted to various kinds of academic dishonesty, such as plagiarism, copying another student's test answers, sneaking crib notes into exams, collaborating with other students on homework assignments when not permitted by the instructor, or lying to the instructor about reasons for late papers. A survey of marketing students indicated 49% of students admitted to some form of cheating (Tom & Borin, 1988). In a survey sent to more than 15,000 students at 31 major universities, over 60% admitted cheating at least once (Meade, 1992). In a meta-analysis, the mean prevalence of cheating was 70% (Whitley, 1998). More recent studies consistently report rates of cheating over 70 percent (Chidley, 1997; Hollinger & Lanza-Kaduce, 1996; Lupton, Chapman, & Weiss, 2000) with cheating behaviors similar to those described by Bowers (Hollinger & Lanza-Kaduce, 1996; Lupton, Chapman, & Weiss, 2000; Tang & Zuo, 1997; Thorpe, Pittenger, & Reed, 1999).

While talking about academic dishonesty it would be unfair to overlook issues that compel a person to cheat. Many areas have been thoroughly studied like personality traits, self image, and intelligence level in this regard. Emotional intelligence is not just about mastering emotions for personal benefit, instead an emotionally intelligent person is able to acknowledge emotions and direct them appropriately. It consists of developing a sense of proportion and an ability to

reason or distract one self from emotional idiocy. Based on this concept one can assume that students who score high on emotional intelligence scale are less likely to indulge in cheating. Similarly, one can assume that students with high self esteem may be less inclined towards cheating as compared to students with low self esteem.

A very interesting fact in this regard is that where a student himself does not cheat, but is found to be helping someone else cheat. A study by Davis et al.(1992) suggested that for students who allow others to get access to their work sheets, 76% of the respondents reported that such an act was carried out because of the thought that 'he/she was my friend'. Some of the other reasons of this act included "He was bigger than me"; "Because they may let me cheat off of them sometimes'; 'I would not want them to be mad at me".

Besides in depth studies on the factors associated with cheating, researches have been carried out on identifying different methods employed by students to cheat in exams. Davis et al. (1992), have found in their survey that approximately 80% of the cheaters copy from a near by paper or use crib notes and the remaining 20% employ unique methods like hiding a calculator, developing a system of hand and feet positions, getting hold of the test copy before exams and pinning a paper flower with detailed notes written on it with the blouse.

A very interesting analysis comes up through different studies indicating that even though the cheating method can be very blatant, students still regard it as a medium offense. However, like for any other form of dishonesty that needs to have effective penalty system to be eliminated for good, academic dishonesty too needs to be given special consideration. A Survey carried out by Davis indicated use of separate forms of the test as the most desirable deterrent to discourage cheating. Informing the students why they should not cheat; separating students seating by empty desks, walking up and down the rows during test and constantly watching the students were some of the other deterrents put forward by Davis's survey report. For specific punishments, it is possible that students who have cheated may suggest less severe punishment than students who have not cheated. Based on a survey report the most popular punishment was for the instructor to tell students to 'keep their eyes on their own paper' and ' giving a failing grade to some one who is caught cheating' (Davis et al., 1992).

There can be many factors responsible for making a student cheat during exams as well as many punishments for this dishonesty. However, to eradicate this

problem not only proper and timely implementations of these penalties are required but at the same time it is equally essential to develop a stronger ethical commitment to self and to the educational institute.

Based on the growing interest in the area of academic dishonesty, the present study was planned to find out the students' opinion regarding prevalence of cheating in the students of Pakistan's educational institutes. The study further aims to investigate the associated factors like gender differences, academic performance, personality traits, self image and responsible sources for making a student opt for cheating. The survey will also reflect on the remedial planning to prevent students from cheating.

METHODOLOGY

A survey was carried out to investigate the prevalence of academic dishonesty in the educational institutes of Karachi. The first phase of the survey was based on a pilot study on 23 Karachi University students belonging to its different departments. Information was collected with the help of a questionnaire which comprised of both open and closed ended questions. It consisted of questions pertaining to prevalence of cheating among students, associated factors, commonly used cheating methods, personality factors behind cheating instances, hypothetical situations in which the respondents were asked to describe their feelings and thoughts for witnessing cheating and finally suggesting punishments for cheaters. The questionnaire also included Anjum Khaliqui – Type A personality scale and a sub-scale of Emotional Intelligence Scale on Positive and Negative self- image by Mark Daniel. The high, average and low self-image scores were categorized on the basis of the interpretative scores in the test manual.

The results of the pilot study (carried out on Karachi University students) indicated low prevalence of cheating and it appeared that students were not presenting the truth. The questionnaire was again reviewed; student population was divided in three groups based on their academic performance (1st, 2nd and 3rd Divisions), their department was noted down and questions regarding guilt feelings associated with cheating and reliability questions were also added. Questions related to guilt were based on identifying if a person can feel guilty for cheating in exams or if the respondents have themselves felt guilty after cheating in class. The reliability questions comprised of a general view of students towards ethical principles; acknowledgment of cheating in games and / or exams;

indirect deceptions like lying to get away with a class test and taking things that do not belong to one self. The reliability check also consisted of five forced choice questions in which respondents had to select between option A (not favoring cheating) and option B (favoring cheating). For determining definite percentage in five forced choice questions, the options with greater ratio was taken as an indication of respondent's trend, either favoring cheating or not favoring cheating. The questionnaire finally comprised of thirty five items and was based on self report format. The sample for the final study comprised of 120 students (60 males and 60 females) from different educational institutes of Karachi. The major defining criterion was the educational distinction into 1st, 2nd and 3rd Division.

After the completion of data collection, information was pooled in. Content analysis was carried out for open ended questions. The responses were then analyzed by comparing percentages of males and females on different questions.

RESULTS

The results of the survey are indicated through chi-square, percentage comparison of different variables (self image; personality type, personality factors; sources; reasons etc) related to academic dishonesty; commonly used cheating methods and appropriate punishments for the act. The results also indicated the response pattern on the questions that were specifically added to check the honest replies of the respondents (reliability checks). The entire data has been analyzed based on percentage difference in males and females across different variables. Only the significant difference in the prevalence of academic dishonesty in males and females has been analyzed using chi-square (Table I).

Table I
Chi- Square – Significant Difference in the Prevalence of Academic Dishonesty in Males and Females

Faculty	N	Cheating Acknowledged F	%	Cheating Denied F	%	df	Chi Square	p
Males	60	43	71	17	28	1	20.32	< 0.001
Females	60	18	30	42	70			

Table II
Academic Status and Academic dishonesty in Males and Females

Academic Status	Males (N=43) F	%	Females (N=18) F	%
First division	14	23	8	13.3
Second division	15	25	5	8.3
Third ivision/Failures	14	23	5	8.3

Table III
Females: Denying the use of unfair means in exams and percentage comparison on Five Forced Choice questions (reliability check) (N=60)

Division	Cheating Denied Freq	%	Percentage Comparison on Forced Choice questions (% of students opting for option B – favoring cheating) Freq	%
1st	13	21.6%	5	38%
2nd	14	23.3%	7	50%
3rd / Failures	15	25%	6	40%

Table IV
Males: Denying the use of unfair means in exams and percentage comparison on Five Forced Choice questions (reliability check) (N=60)

Division	Cheating Denied Freq	%	Percentage Comparison on Force Choice questions (% of students opting for option B – favoring cheating) Freq	%
1st	6	10 %	3	50 %
2nd	5	8.3 %	3	60 %
3rd / Failures	6	10 %	4	66 %

Table V
Personality types and Academic dishonesty in Males and Females who acknowledged cheating

Personality Types	Males (N=43)		Females (N=18)	
	F	%	F	%
A	29	48	12	20
B	11	18	5	8.3
A-B	3	5	1	1.6

Table VI
Acknowledgement of cheating based on Academic status and Self esteem in Females (N=60)

Division	High Self-esteem		Cheating *Ackn	Denied	Average Self esteem		Cheating Ackn	Denied
	Freq	%	%	%	Freq	%	%	%
1st	9	45 %	33 %	66 %	11	55 %	45 %	54 %
2nd	7	35 %	28 %	71 %	12	60 %	16%	83 %
3rd / Failures	9	45 %	11 %	88 %	10	50 %	40 %	60 %

* Ackn = Acknowledged. * Two respondents had low scores on self image

Table VII
Acknowledgement of cheating based on Academic status and Self -esteem in Males (N=60)

Division	High Self esteem		Cheating *Ackn	Denied	Average Self esteem		Cheating Ackn	Denied
	Freq	%	%	%	Freq	%	%	%
1st	8	40 %	50 %	50 %	12	60%	83%	16%
2nd	3	15 %	33 %	66%	17	85 %	29%	23 %
3rd / Failures	3	15 %	33 %	66 %	17	85 %	82%	17 %

*Ackn = Acknowledged

Table VIII
Percentage Comparison of Males and Females who Denied Cheating and their Response Pattern on Three Hypothetical Situations and Forced Choice Questions (N=20)

Gender	Total number of respondents who denied using unfair means in academics but responded positively on the three hypothetical situations.	Percentage Comparison on Forced Choice questions (% of students opting for option B – favoring cheating)	
		F	%
Males	14	12	85%
Females	20	9	45%

Table IX
Percentage Comparison in Males' and Females' Agreement on a possible difference in cheating styles

Variables	Males		Females	
	F	%	F	%
Yes	24	40	22	36.6
No	36	60	38	63.3

Table X
Personality factors related to academic dishonesty

Variables	Males		Females	
	F	%	F	%
Goal oriented Behavior	21	35	10	16.6
Low self esteem	16	26	24	40
Adventure seeking	10	16.6	13	21.6
Perfectionism	10	16.6	10	16.6
Impulsivity	3	5	3	5

Table XI
Students opinion on prevalence of Academic dishonesty in Educational Institutes

Variables	Males		Females	
	F	%	F	%
Government Institutes	50	83.3	48	80
Private Institutes	6	10	7	11.6
Both	4	6.6	5	8.3

Table XII
Common Cheating methods

Variables	Males		Females	
	F	%	F	%
Crib notes	35	58	52	86
Copying/Friends help	34	56	26	43
Mobile phone	11	18	3	5
Teachers help (bribery)	5	8.3		
Political pressures	1	1.6		

Table XIII
Reasons behind academic dishonesty

Variables	Males		Females	
	F	%	F	%
Poor preparation	28	46.6	25	41.6
Need for good marks	24	40	29	48.3
Parental approval	7	11.6	11	18.3
Poor memory/ recall	3	5	10	16.6
Peer pressure	1	1.6	5	8.3
Biased Teachers	1	1.6	1	1.6

Table XIV
Responsible sources for academic dishonesty

Variables	Males		Females	
	F	%	F	%
Students	23	38.3	23	38.3
Teachers	19	31.6	11	18
Educational Institutes	16	26.6	21	35
Parental pressure	8	13.3	6	10
Government/Ministry of Education	2	3.3		

Table XV
Punishments for reducing academic dishonesty

Variables	Females		Variables	Males	
	F	%		F	%
Cancellation of paper	19	31.6	Suspension	17	28.3
Suspension	16	26.6	Warnings/ Fine	9	15
Warnings/ Fine	11	18.3	Cancellation of paper	6	10
Marks deduction	6	10	Marks deduction	3	5
No punishment	5	8.3	No punishment	2	3.3

DISCUSSION

Academic dishonesty over the number of years has become so widespread that it is hardly considered immoral by students. It might be for this very reason that under certain circumstances some students feel that cheating can be justified (LaBeff et al., 1990). A survey of faculty at a multi-campus community college found that eighty percent of respondents had suspected academic dishonesty in their classes and sixty-five percent had been certain of dishonesty (Burke, 1997). The present survey conducted with an aim to investigate the prevalence of cheating in students revealed that 71% of the total male sample acknowledged that they have cheated at some point in their academic life. For female students the figures indicates a prevalence of 30%. The results of chi – square further strengthens the result ($p<0.001$). Higher cheating instances in males have also

been reported in other studies as well. Davis, Grover et al. (1992) found out that rate of cheating in high school range from 51% by women at a small state university to 83% by men at a large state university. Quite surprisingly, as believed by most people that students who are poor in studies tend to indulge more in such acts then the A or B grade students. Researches further prove this common idea. They have found out that students who are most likely to cheat have lower academic standing, are more concerned about attaining high grades than gaining knowledge, and are enrolled in larger rather than smaller institutions (Bowers, 1964; Nowell, & Laufer, 1997; Smith, Nolan, & Dai, 1998; Tang, & Zuo, 1997; Thorpe, Pittenger, & Reed, 1999). However, the current study results indicate that out of 18 female students, who acknowledge cheating, 13 % had secured first division, 8 % had achieved second division and the third division also included 8 % of females who acknowledged cheating. The percentage comparison across different division for males indicated a little changed picture as 23% of first division, 25% of second division and 23% of third division acknowledged cheating (Table II). The results of the 29th Who's Who Among American High School Students Poll Statistics released in November 1998 indicated that 80% of the best students cheated to get to the top in their class.

On the reliability scale it appears that female students might not have been truthful in accepting that they have cheated. For instance, 23% (14) females securing second division (N=20) in the last exam denied cheating, however, out of these almost 50% (7) opted for option B in the forced choice question (reliability check questions) which indicated that they would prefer to cheat or use other unfair means than to loose marks. Similarly 25% (15) third division students (N=20) denied cheating but opted for option B (40%). These in a way correspond well with the earlier research results (Table III). Some what coherent results of the current study with the other researches on academics and cheating behavior mentioned above signifies similar trend. It can be seen in the response pattern of male students where 66% of students securing third division (N=20) opted for option B where 10 % (6) from the same class denied cheating (Table IV).

One important personal trait that appears to correspond with cheating behavior is Type A and B personality types. Since type A are more achievement and goal oriented and more competitive than type B, one may assume that cheating behavior will be more common in Type A. Earlier researches however, have failed to come up with any specific association between the two (Huss et al., 1993, and Perry, Kane, Bernesser, & Spicker, 1990). The result of the current study however indicated that students having Type A personality (males: 48%;

females: 20%) admitted of academic dishonesty compared to type B (males: 18%; females: 8.3 %) (Table V). This difference could be due to the fact that sample was not selected based on the personality types.

In close relation with personality type is the aspect of self image, which is the degree to which a person views him-or herself as a good person (Antion & Michael, 1983; Thorpe, Pittenger, & Reed, 1999). Tang and Zuo (1997) hypothesized that students with higher rather than lower levels of self-esteem would be less likely to cheat on college examinations but found no relationship. Compared to this study results current survey indicated that 33% females belonging to first division group (N=20) and having a high positive self-image acknowledged cheating compared to 45% cheating acceptance in females having average self – image from the same division group (Table VI). The interpretation of the average positive self image in itself tends to exhibit a trend towards an inability to judge oneself and actions in a proper and realistic way. Similar trends are found in males where 83% students (N=20) having average positive self – image acknowledged cheating compared to 50 % high self image students from the first division group (Table VII). The discrepancy can be observed on other reliability checks where female students have denied cheating instances. Referring to Table VIII it can be observed that of 20 female students who denied cheating belonging to different divisions not only considered it okay for a student to cheat or show a little bit dishonesty otherwise but also opted for option B (45%). Similar trend was shown by males where 85% initially denying any personal attempt to cheat, agreed to cheating behavior otherwise. Such a pattern indicates a possibility that the respondents were not truly presenting the information.

Further analysis indicates that there appears to be no difference in the cheating styles of males (60%) and females (63%)–Table IX. Nevertheless the observed figures indicated the personality traits that can be linked to cheating instances as reflected by males and females. Table X indicates that male students consider goal oriented behavior to be one of the personality factors responsible for instances of cheating (35%) whereas for females, low self - esteem is the main personality factor related to academic dishonesty (40%). The low self esteem can make a female cheat to gain good marks and in a way enhancing self esteem by getting approval from others. Impulsivity is regarded as the least valid personality factor to academic dishonesty by both males and females (5%). Studies have also revealed that cheating is more prevalent in students who attend college to obtain a credential or license than those who attend for other reasons (Daniel, Blount, & Ferrell, 1991; McCabe & Trevino, 1996; Stern & Havlicek, 1986).

Apparently, some forms of cheating are more prevalent than others. Specifically, plagiarism and copying homework are more common than cheating on tests or submitting another student's paper. The current study corresponds to the results as the survey respondents felt that cheating is more common in Government institute (M= 83%; F= 80%) compared to Private institute (M= 10% and F= 11%). Such high percentage may reflect students' bias where cheating can occur in equal magnitude in private institutes (Table XI). They further felt that despite a possible bias the reason for high instance of cheating at Government institutes especially in Pakistan can be because of large number of students in one class and lack of supervision. Same results were found by Bowers in 1964 on cheating and large class sizes.

One of the basic reasons for conducting this survey besides finding out the prevalence was to look into the commonly observed cheating methods (Table XII); the reasons behind it (Table XIII); the sources for academic dishonesty (Table XIV) and the punishments that can help resolve this problem (Table XV). Crib notes came out to be the most commonly used method for cheating (males = 58%; females = 86%). Copying from friends copy comes second in the list with a prevalence percentage of 56 by males and 43 by females. Male students also regarded political pressure as one way of cheating (1 %). Male students believed that poor preparation leads one to cheat (46%) whereas females considered need for good marks to be the motivating force behind cheating instances (48%). Earlier researches mentioned above have quoted parental pressures and approvals as the reason for making a student cheat. However, the survey results indicated that 11% of males and 18% of females held parental approval responsible for academic dishonesty in students.

The question related to who should be blamed for academic dishonesty, 38% of males and equal percentage of females (38%) was of the view that students themselves are responsible for this unethical act. For males, teachers come in second on this list (31%). Studies have revealed that indifferent professor or uninteresting and unimportant subject matter may make students feel less moral obligation to avoid cheating (Ashworth, Bannister, & Thorne, 1997; McCabe & Trevino, 1996). Females also held educational institutes responsible for this act (35%). Earlier researches have shown that if the policies are communicated effectively and if students are aware of the penalties they tend to reduce dishonest behavior (Aaron, 1992; Crown & Spiller, 1998; McCabe & Trevino, 1996). Parental pressure again indicated low preference by both males and females (13% and 10% respectively; Table XIV).

The remedial planning or the penalty system for academic dishonesty indicated that female students reported that the cheaters paper should be cancelled (31.6%) and they can also be suspended (26.6%). Some even suggested marks deduction (10%) and very few were of the opinion that there should be no punishment for such students (8.3%). For males suspension was the most agreed upon punishment (28.3%) followed by warnings/signs (15%). No punishment was suggested by 3.3% of the male students (Table XV). One may infer that they can be the students who have cheated in the exams at some point in their life. To improve the examination standard some students suggested that there should be strict invigilation during exams, parents of such students should be contacted and matter should be brought into their knowledge, students found to have cheated should not get admission in any educational institute and admissions should be based on merit. Suggestions of bringing a change in teaching style and talking to the student who have cheated and knowing the causes of his actions were also put forward by the female students.

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ERRORS IN SHORT-TERM MEMORY: A COMPARISON AMONG THREE POSITIONAL MODELS IN PATIENTS WITH DEMENTIA AND NORMAL SUBJECTS

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ABSTRACT

The present study was meant to investigate the types of error committed by dementia patients and normal subjects during recall under three different models. For this purpose three groups of subjects (N=81) were selected. Demented patients were referred from neurological and psychiatric wards of different hospitals of Peshawar. Mini Mental State Examination (MMSE) was used to determine the intensity of dementia. The score obtained on MMSE helped in the bifurcation of the patients into two group's i.e. severe and moderate dementia. Third group (control group) was matched on age, gender, education, and socio-economic status from normal population. Indigenous lists of visual clips based on relative, absolute and temporal coding of position were used to measure the types of error. One-way ANOVA was applied and the differences in types of errors among three positional models by patients with severe and moderate dementia and normal subjects were discussed. The present research highlights four types of error which are omission, intrusion, transposition and confusion.

INTRODUCTION

Problem of serial order is pervading many aspects of our behavior, from the order of finger movements in a skilled key punch operator, to the order of words in a sentence. In the most recent development of models, the trend has been towards connectionist or neural network models, which explains the mechanism involved in serial memory in terms that can be analyzed on neural hardware (Brown et al., 2000).

On the basis of sophistication and explanatory power of recent models, one might assume that the problem of serial order in short term memory had been solved; however, this is not meeting the criteria in all the cases. In this regard three different solutions to this problem have been proposed over the years and now, all these have been recently reemerged in computational models of short-term memory. Henson (1998) called these chaining, ordinal and positional theories. After extensive studies, it is concluded that chaining and ordinal representation are not sufficient to account for errors people make during recall from short-term memory, while positional approach gets its attention by assuming that each item is associated with its position in a sequence. It can also be explained in terms of hierarchical system (Lee & Estes, 1981) e.g. a phoneme has code for its position in a syllable, syllable in a word and word in a sentence.

According to Henson (1998), three different types of positional codes are possible i.e. Absolute, Relative and Temporal. According to temporal coding of position items are associated with the states of temporal oscillators of different frequencies. By rewinding the clock or resetting the oscillators the recall can be triggered. In absolute model items are coded with their absolute (ordinal) position e.g. first, second and third etc. This idea was adopted from Articulatory loop model of Burgess and Hitch (1992), which suggest that window of activity changes only when a new item is presented. In relative coding of position the items are coded with reference to both the start and end of a sequence. By supposing that first item which is strongest at the start of a sequence decreases in strength and end item which is weakest at the start increases in strength towards end.

Distinction can be drawn among these positional coding through examining the errors people make when they miss to recall a sequence. There are different types of errors, which people make during recall. The earliest measurement of serial recall was the proportion of list recalled correctly (e.g. Cromell & Parrish, 1957).

But this measure ignores the type of errors committed in the recall of different item in a list. In this regard Murdock (1968) is the initiator of serial position curve that indicates proportion of items recalled correctly at each position of a list. This curve shows that in immediate serial recall, primacy is normally more pronounced than recency. Later on two main types of errors were distinguished i.e. item error and order error: order error means recall of items in the wrong position whereas item error is the omission of list items. In addition, Henson gives a more comprehensive classification of error.

Omissions arise when an item is not given in a result of response. Transpositions are list items in the wrong position. Intrusions are items introduced which are not present in the list. Repetitions are items which occur more than once in a report, even though they only occur once in the list. Confusion means when incorrect item has any similarity with the correct item. Interposition can be defined as when lists split into groups e.g. by pause between presentation of every third or fourth item and they make errors by means of transposition between groups, which maintained their position within a group, etc.

All the above mentioned studies reveal the facts in a normal course of events. But there are certain other peculiar conditions which also indicate memory disturbance of different kinds with neurological disturbance known as dementia. The authors of this article for the first time attempted to see the relationship between the existing knowledge of memory models and different levels of dementia. Therefore, normal as well as two different intensities of dementia were studied in this perspective.

Dementia is the decline of memory and other cognitive functions in comparison with the patient's previous level of function as determined by a history of decline in performance and by abnormalities noted from clinical examination and neurological test (Roberts et al., 1993).

To overcome the problem of serial order, much work has been done. All the proposed models aim to give the best solution for the problem of serial order. The present study was aimed to see which positional model will, at maximum level, reduce the chances of error. It also attempts to find out that in case of different stages of dementia what kind of errors takes place, under three different models. So it was hypothesized that the three groups of sample will commit different types of errors under three different conditions.

METHOD

Participants

The sample consisted of eighty one subjects ranging in age from fifty to seventy five. Fifty four subjects were selected from the Psychiatric and Neurological wards of three hospitals of Peshawar. The control group consisting of twenty seven subjects was matched with the experimental group in terms of age, education and socioeconomic status.

Inclusion criteria

1. The consent of the patients or their near relatives to participate in the study was obtained
2. Patients with brain damage/ injury or substance abuse were not included in the sample. Furthermore, patients who were unable to recognize objects comprising test material were also excluded.

Instruments

The following instruments were used:

1. Mini Mental State Examination Test (Aziz et al., 2001).
2. Indigenous List of Visual Clips based on Henson's models(1998)
   Temporal coding of position
   Relative coding of position
   Absolute coding of position

Procedure

The present study explored the types of errors committed by dementia patients and normal subjects under three different conditions. For this purpose, all those patients suffering from memory impairment referred to us either by neurologist or psychiatrists and who were willing to participate in this study were given MMSE. The result helped in the bifurcation of the patients into severely disturbed and moderately disturbed dementia patients. An equal number of participants in control group were also matched in age, gender, and other

demographic variables having no neurological dysfunction. These patients were then randomly assigned three types of serial learning namely temporal, absolute and relative. Consequently, we had nine different groups each having nine subjects.

In temporal presentation, a list with six items was presented. Each item was shown separately with constant timing i.e. five minutes (e.g. first item was presented at 4:00 o'clock, second item was presented at 4:05 and the third was presented at 4:10 and like wise). The time was used as a cue i.e. by resetting the oscillators the order of item was to be recalled.

In absolute model, three lists were shown. First list consisted of five items while second list comprised of six items. The third list, likewise, after the addition of yet another item, comprised of seven items. By including these additional items the degree of accuracy of recall memory was noted.

In relative coding of position two lists were shown, each having five items. Second list was the same but shown in reverse order. In all conditions, types of error were noted.

RESULTS

Table 1
One way ANOVA results of severe dementia patients for omission error

		N	Mean	SD	F	p
Omission Error	Relative Coding of Position	9	4.7778	3.59784	1.262	.301
	Absolute Coding of Position	9	6.6667	4.50000		
	Temporal Coding of Position	9	4.2222	1.39443		

The results suggest that there is no significant difference of severe dementia patient's responses for omission error on three models of positional coding ($F = 1.262$ $df = 2, 25$, $p > .301$).

Table II
One way ANOVA results of severe dementia patients for transposition error

		N	Mean	SD	F	p
Transposition Error	Relative Coding of Position	9	.3333	.50000	.676	.518
	Absolute Coding of Position	9	.5556	.88192		
	Temporal Coding of Position	9	.7778	.97183		

Table results suggest that there is no significant difference of severe dementia patients for transposition error on three positional models ($F = 0.676$ df = 2, 25, $p > .05$)

Table III
One way ANOVA results of severe dementia patients for intrusion error

		N	Mean	SD	F	p
Intrusion Error	Relative Coding of Position	9	.0000	.00000	3.368	.051
	Absolute Coding of Position	9	.4444	.72648		
	Temporal Coding of Position	9	.0000	.00000		

Table results suggest that there is insignificant difference of severe dementia patient's responses on intrusion error at three models of positional coding ($F = 3.368$ df = 2, 25, $p > .05$).

Table IV
One way ANOVA results of severe dementia patients for confusion error

		N	Mean	SD	F	p
Confusion Error	Relative Coding of Position	9	.6667	.70711	8.000	.002
	Absolute Coding of Position	9	0.0000	.00000		
	Temporal Coding of Position	9	0.0000	.00000		

Table results suggest that there is a significant difference of severe dementia patient's responses for confusion error on three positional models ($F = 8.000$, $df = 2, 25, <.002$).

Fig. 1 Errors committed by Severe dementia patients

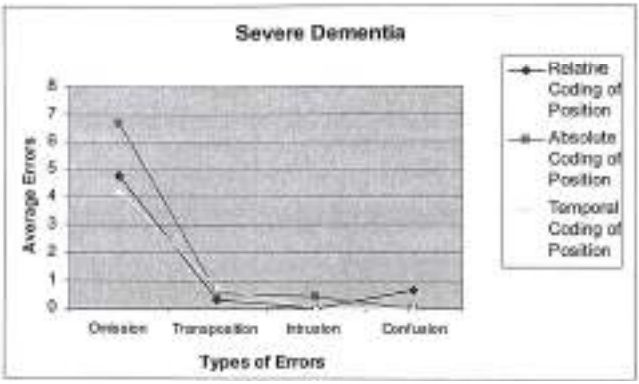


Table V
One way ANOVA results of moderate dementia patients for omission error

		N	Mean	SD	F	p
Omission Error	Relative Coding of Position	9	1.8889	1.53659	9.656	.001
	Absolute Coding of Position	9	4.8889	2.42097		
	Temporal Coding of Position	9	1.2222	1.56347		

Table results suggest that there is a significant difference of moderate dementia patient's responses on omission error at three models of positional coding ($F = 9.656$ df = 2, 25, $p < .001$).

Table VI
One way ANOVA results of moderate dementia patients for intrusion error

		N	Mean	SD	F	p
Intrusion Error	Relative Coding of Position	9	.4444	.52705	5.692	.009
	Absolute Coding of Position	9	.7778	.66667		
	Temporal Coding of Position	9	0.0000	.00000		

Table results suggest that there is a significant difference of moderate dementia patient's responses on intrusion error at three models of positional coding ($F = 5.692$ df = 2, 25, $p < .009$).

Table VII
One way ANOVA results of moderate dementia patients for transposition error

		N	Mean	SD	F	p
Transposition Error	Relative Coding of Position	9	.5556	.72648	10.146	.001
	Absolute Coding of Position	9	.7778	1.20185		
	Temporal Coding of Position	9	3.1111	1.83333		

Table results suggest that there is a significant difference of moderate dementia patient's responses on transposition error at three models of positional coding ($F = 10.146$, $df = 2, 25$, $p < .001$).

Table VIII
One way ANOVA results of moderate dementia patients for confusion error

		N	Mean	SD	F	p
Confusion Error	Relative Coding of Position	9	.7778	.66667	12.250	.000
	Absolute Coding of Position	9	.0000	.00000		
	Temporal Coding of Position	9	.0000	.00000		

Table results suggest that there is significant difference of moderate dementia patient's responses on confusion error at three models of positional coding ($F = 12.250$ $df = 2, 25$, $p < .000$).

Fig. 2 Errors committed by moderate dementia paticuts

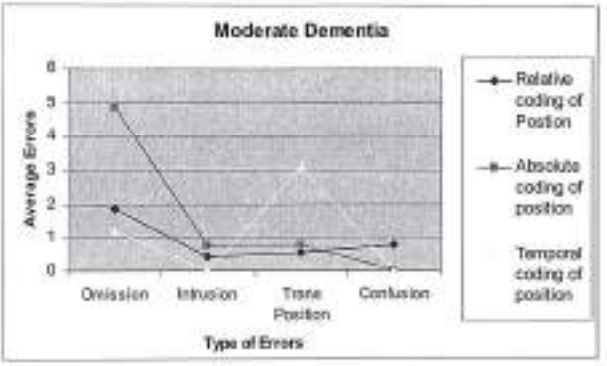


Table IX

One way ANOVA results of normal subjects for omission error

		N	Mean	SD	F	p
Omission Error	Relative Coding of Position	9	.6667	.86603	4.994	.015
	Absolute Coding of Position	9	2.3333	1.93649		
	Temporal Coding of Position	9	.7778	.44096		

Table results suggest that there is a significant difference of normal subjects responses on omission error at three models of positional coding ($F = 4.994$ df = 2, 25, $p < .015$).

Table X
One way ANOVA results of normal subjects for Intrusion error

		N	Mean	SD	F	p
Intrusion Error	Relative Coding of Position	9	.5556	1.13039	1.425	.260
	Absolute Coding of Position	9	.4444	.72648		
	Temporal Coding of Position	9	1.1111	.78174		

Table results suggest that there is no significant difference of normal subjects responses on intrusion error at three models of positional coding ($F = 1.425$ $df = 2, 25$, $p > .05$).

Table XI
One way ANOVA results of normal subjects for transposition error

		N	Mean	SD	F	P
Transposition Error	Relative Coding of Position	9	.2222	.66667	3.896	.034
	Absolute Coding of Position	9	1.3333	1.00000		
	Temporal Coding of Position	9	.7778	.83333		

Table results suggest that there is a significant difference of normal subjects responses on transposition error at three models of positional coding ($F = 3.896$ $df = 2, 25$, $p < .034$).

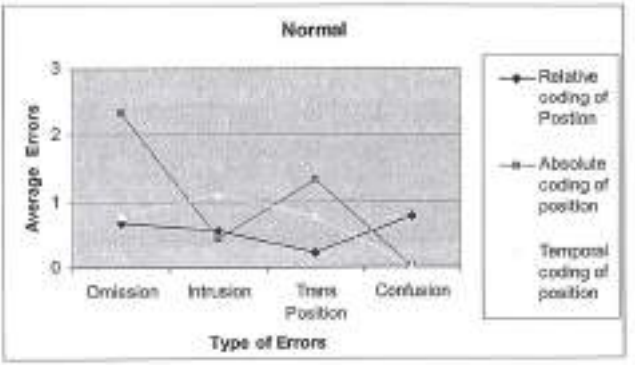
Table XII

One way ANOVA results of normal subjects for confusion error

		N	Mean	SD	F	p
Confusion Error	Relative Coding of Position	9	.7778	.66667	12.250	.000
	Absolute Coding of Position	9	.0000	.00000		
	Temporal Coding of Position	9	.0000	.00000		

Table results suggest that there is a significant difference of normal subjects responses on confusion error at three models of positional coding ($F = 12.250$ df = 2, 25, $p < .000$).

Fig. 3 Average errors committed by normal subjects



DISCUSSION

The present neuropsychological data raised the following four types of errors, i.e., *Omission, Intrusion, transposition, confusion*. Severely disturbed dementia patients have done more omission error under absolute coding of position. A few severely disturbed dementia patients committed transposition error while none of them committed intrusion error. It seems as if they have no creative ability, identify impairment in episodic as well as semantic memory which made them handicap to produce something from their previous learning.

Transposition error was high in temporal coding of position while confusion error was more frequent in relative coding of position because second list of items presented was in reverse order. These results are consistent to the findings of Hume et al. (1997) and Madigan (1971).

The moderate group has also committed the omission error with absolute coding of position while transposition was higher in temporal coding of position and confusion error occurred in relative coding of position. The situation was the same with normal group as well. On the whole, each group responded differently incorporating various types of errors.

In normal group, maximum errors were of intrusion, while slightly higher in moderate and negligible is severely disturbed group. It shows that intrusion error is likely to be committed by active brain, which has the ability to fill gaps. In case of absolute coding of position no intrusion error occurred despite the fact that three lists were presented.

From the above findings, we can conclude that repeat exercise can, at least, bring a gradual cessation of further deterioration. While at temporal model not only dementia patients but also normal subjects performed poorly.

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FALLACY ABOUT MALE-TO FEMALE GENDER DYSPHORICS IN PAKISTAN

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ABSTRACT

A research was conducted on Male-to Female Gender Dysphorics (Hijras) having their inborn gender as that of a female and their categorization as such. It had three major perspectives; the first was to define, identify and label different types of Hijras, which usually come under one heading. The second was the categorization of the similarities and the differences among each type of male-to-female gender dysphorics and thirdly to investigate whether male-to-female gender dysphorics fall into any single category as represented by their personal, social or sexual identities. It was found that in Pakistan, unlike elsewhere in the world, very little work had been done on Hijras. It was also noticed that religion largely influences the identity and controls the unacceptable behavior of Hijras (gender dysphorics). The hypotheses of the research have been confirmed thus giving us the results: the word Hijra was used by people in Pakistan in different meanings, the factors like certain family, social and cultural behaviors, the unfavorable family environments and the economic status and education of the parents enhance the femininity and shape the controlled and expressed behavior of these Hijras. The study also affirmed different discrepancies of Hijras. This research will have positive implications on the studies like further investigation of the types of the gender dysphorics in Pakistan. This will also be a base for understanding the cognitive issues of gender dysphorics, their various dimensions and the impact of religion on their social life that has never been investigated before. All this will lead to the much-needed awareness about the gender dysphorics in Pakistan.

HAIDER & BANO

INTRODUCTION

Studies, research and interactions have more than established the fact that man is a social being. His inter-reliance requires of him to develop norms and forms of social living and in so doing, a society is formed that attributes various roles and traits to different individuals, who either acquire these by necessity or inherit them by way of natural dispositions. God has created humans as the best of his creations and endowed them with the highest degree of intelligence and the ability of verbal communication. However, there is, but one phenomenon common to all creations; assigning of different genders; male and female, each with a potential to reproduce by a sexual union with the other. Nonetheless, amongst the humans, there is also a third gender whose identity is confusing; apparently males yet behaving like females.

We in our society generally recognize such individuals by their manners only and call them *Hijras*; a generalized label affixed by our limited knowledge of them. We simply recognize them as those who lack the reproductive ability and are impotent. They are ridiculed, insulted and taunted, which is a common social behavior towards them, expressed through words and acts. Nevertheless, it is very important to know what actually a *Hijra* is. "*Hijra*" is a community that very much exists amongst us. They are humans and are normal as others, and yet, believed to be abnormal by fellow human beings. Our noble Prophet (s.a.s.) said that they were just "normal human beings and that they should always be seen as such". But unfortunately the society has disregarded and declared them outcasts for the reason that they are brave enough to have expressed their "true gender" in defiance of the social and moral norms, thus have invited the wrath and insults of the society.

Gender refers to a whole complex of social beliefs, attitudes, behavior, occupation, activities and the like that are typically associated with females or with males in a given society. Gender is the most defining factor in the spectrum of elements that comprise the human persona. In fact, gender is very basic to our identity; most people mistakenly assume that our sense of being male or female is defined with absolute certainty by our anatomical sex. Contrary to popular belief, one's sense of gender and one's anatomical sex are two distinct elements, each developing at different times in different parts of the body.

There is a big difference between sex and gender. Sex is all about the body. Sex is how the body is shaped, how it functions, male or female. Gender is the 'sex'

of the brain apart from the body. According to Mumper (1989) "gender" is used to designate the cultural, social, and psychological variations in the two sexes, and the term "sex" refers to the biological difference. Similarly, in very simple words Sandra (2001) explains that gender is the identity of the person inside the body.

Joanne (2002) explains Gender as the integral part of "Self", is like a complex maze of many variables. Gender expression, gender attribution, gender identity, and gender role are some of the concepts through which gender is defined and experienced. They answer "who", how "what and which", in combination and they provide the framework of a person's collective gender environment, both internal and external.

We have already studied the appearance of humanity in two social (biological) genders; male and female. Male-to-Female gender dysphorics are the subjects of our main study who are classified as the third gender. Similarly our culture also tends to limit gender to a man and a woman only. It uses the word "*Hijra*" for a person who on the bases of his gender does not fall in the strict category of a man or a woman. The Quran never uses the word *Hijra* [*Khastiy*], but the Hadith and the books of the legal scholars have done so. The Qur'an recognizes that some men are "without the defining skill of males" (24:31: "*ghair oolaa il-irbati min ar-rijaali*").

Gender Dysphoria

Operationally defined, Gender dysphoric is a male or female who has a life long feeling of being trapped in the wrong body. In our culture, the word "*Hijra*" (Male-to-Female gender dysphoric) is used as an umbrella term that includes all the persons with:

- Physical anomaly (impotence)
- Physiological androgyny (intersex)
- Sexual androgyny (homosexual)
- Behavioral androgyny, (personal social anomalies in gender)
- Psychological androgyny (anomalies in gender identity)

Keeping in mind the general criteria used by people in Pakistan to define "*Hijra*" the researcher has mentioned some new aspects related to the term "*Hijra*." They are unique because they have an active social organization, which is both

traditional and ritualistic. *Hijras* do not disclose their identity; shrouded in myths and false portrayal.

Hijra as an Umbrella Term

The term *Hijra* in Pakistan is used as an adjective, as a noun and as a verb and it covers five major areas.

- *Hijra* as a "noun" represents an individual, having physical dilemma (impotent), sexual dilemmas (homosexual), gender dilemma (Male-to-Female gender dysphoric), genital dilemma (hermaphrodite), or behavioral dilemma (cross-dresser).
- *Hijra* as a "noun" represents a community, which deviates from cultural norms in terms of dress, sex and gender.
- *Hijra* as a "verb" represents a distinct toil where cross-dressing is obligatory for living.
- *Hijra* as an "adjective" represents an individual, having a social problem (failed man) who feels that he has failed miserably as a man and may seek to find an easier life by portraying as a female.
- *Hijra* as an "adjective is often attributed as an abuse to a man who is whimsical, womanly, effeminate, impotent or ineffective.

Hypotheses

1. There will be significant difference between the gender identities of different types of male-to-female gender dysphorics.
2. Lesser the knowledge of the general public and the non-availability of different terms about the gender dysphoria, higher will be the usage of the umbrella term Hijra for different anomalies.
3. Higher the curbs on gay prostitution in a society, higher will be the adoption of disguise by gay males (fake *Hijras*) to achieve sexual and monetary gratifications.
4. Higher the proportion of feminine gender, higher will be the tendencies towards feminine gender and earlier will be the onset of cross-dressing.

METHOD

Participants

Two hundred and nineteen Male-to-Female gender dysphorics with ages ranging between fifteen to fifty- five years were chosen to participate. Male-to-Female gender dysphorics were those who were born with male primary sex organs and were raised as males but reported some degree of frustration with their assigned sex role. They categorized themselves amongst five categories of gender dysphoria namely, transvestites, feminine male, transgender, probable-transsexual and transsexual. The criteria for determining gender dysphoria was set upon its operational definition and never was it deemed final until the participant had been reported as "*Hijra*" for at least six months.

Information about the breakdown of gender dysphorics by way of their age, race and their total population in Pakistan was not handy. These participants were drawn from different areas of Pakistan namely Peshawar, Mardan, Abbottabad, Haripur, Islamabad, Lahore, Swat, Nagumaan, and Mansehra. Sample selection was carried out using the snowball technique depending on the availability of gender dysphorics. Amongst them only thirty percent were married while seventy percent were unmarried. No one was under fifteen years of age and nobody showed any signs of psychosis when the researcher interviewed them.

Instrumentation

The following instruments were used in the present study:

1. Personal Information Sheet
2. The demographic data sheet included age, education, number of sibling, age of first cross-dressing, childhood playmates and parents education.
3. Identity scales
4. Combine Gender Identity And Transexuality Inventory (Cogiati)
5. Personal Identity Scale (PIS)
6. Social Identity Scale (SIS)
7. Sexual Identity Scale (SXIS)

Banks (1988) and Reitz (1998) designed these scales for Male-to-Female gender dysphorics in order to measure their Personal Identity, Social identity, Sexual Identity and Sexual Orientation. These scales were translated and slightly

modified by reducing the number of questions and by grouping the answers to change this 7-point scale into 4-point scale. The reason for this modification was the cultural differences and the education level of the group. Some questions were not in accordance with our culture and religion.

Procedure

Every interviewee was given a series of questionnaires i.e. fourteen instruments, each comprising of sections, one for the participants' demographics and second for the Likert-scale questions about their Self-concept, Religiosity, Family Traditional Religious Beliefs, Degree of Parental Acceptance-Rejection and Degree of Parental Trust and Guidance that they had received. The researcher had to read out all the scales because the gender dysphoric participants were mostly illiterate.

The second section was for the Likert-scale questions to which the interviewee had to assign his level of agreement. The questions fell into five categories; three of these dealt with the three dimensions of gender identity, the fourth and fifth intended to verify the participant's sexual orientation and social identity respectively. Each question was endorsed by the participant on a scale from 1 (meaning "strongly disagree") to 5 (meaning "strongly agree") however, because of the requirement for correct assessment, scaling and ultimately to get the true results, the questions were placed in random in each of the category.

For the purpose of the questionnaire, personal identity is presented as the state of the person's genitals: Social identity is operationalized as living (publicly) as male or female. Sexual identity is operationalized as how the participant wants to be seen by a lover in sexual encounters.

Array of Hijras in Pakistan

Basically there are four types of *Hijras*.

1. Hermaphrodites born with ambiguous sex genitals
   a) Female organs
   b) Male organs
   c) Ambiguous organs

2. Khusra born with normal sex genitals
   a) Willingly castrated
   b) Forcibly castrated
   c) Customary castrated
   d) Not castrated

3. Gender dysphoric born with normal sex genitals
   a) Female soul in male body
   b) Male soul in female body

4. Asexual born with normal sex genitals but they have no sexual desire for male or females
   a) Muklasmis
   b) Muklasmas

Figure 1
Complete Profile of Different Types of Hijras in Pakistan

Profile	Genital	Gender Femininity-Masculinity	Personal Identity	Dressing Social Identity	Sexual Issues	Conversion operation
Khawaja-Sara	Male	Very high Masculinity	Normal orientation	Forced dressing	Asexual.	Forced castration
Nirban	Male.	High – Femininity Low- Masculinity	Covered expression with strong feminine side	Lives dressed and work as a women	Desires relations with normal male as "Female"	Willful castration
Kasthra	Male or female, in combination of both	Very high Femininity Very low Masculinity	Personal expression with strong feminine side	Dress, Live, work as a woman. Gender discomfort	Low libido. Asexual, autosexist, or homosexual	Rejected but also attractive
Janamdra	Male	High-Femininity Moderate-Masculinity	Find happiness expressing both genders.	Dresses others called of gender discomfort	Libido low. Asexual or autosexist, or bisexual	Attractive but not requested
Mukhannath	Male	High-Femininity Low-Masculinity	Strong degree of discomfort	Lives dressed and work as a woman.	Low libido. Asexual, autosexist	Attractive but not requested
Mukhannas	Male	Very high Femininity Very low Masculinity	Showed a strong degree of gender discomfort	Dress, Live, work as a woman. Gender discomfort	Asexual, autosexist.	Not interested
Ajeeb-ul Hijra	Complete Male or female, in combination of both	Depends on their inborn Gender orientation after puberty	Androgynous depends on gender assigned to them	Depends on the way raised/Gender discomfort	Low libido. Asexual, autosexist, or positive homosexual.	Not interested

Zenkh Zubagan	Complete Male or female, in combination of both	Very high Feminility Very low Masculinity	Showed a strong degree of gender discomfort	Dress, Live, work as a woman.	Asexual, submissive	Alternative but not requested
Alkha	Complete Male or female, in combination of both	Depends on their inborn Gender observable after puberty	Personal expression with strong feminine side	Lives dressed and work as a woman	Low libido, Asexual, sensorotic, or passive homosexual	Alternative but not requested
Brides of God	Male	High Feminility Low Masculinity	Personal expression with strong feminine side	Dress, Lives, work as a women. Gender discomfort	Low libido, Asexual, sensorotic	Alternative but not requested
Zenana	Male	Very high Feminility Very low Masculinity	Personal expression with strong feminine side	Dress, Live, work as a woman. Gender discomfort	Desires relations with normal male as "female"	Not interested
Kancha	Male	Very high Masculinity Very low Feminility	Natural orientation	Natural dressing	Heterosexual except when dressed	Idea of castration is foreign
True *Hubrag*	Complete Male or female, in combination of both	Depends on their inborn Gender observable after puberty	Androgynous depends on gender assigned to them	Depends on the way mind/Gender r/discomfort	Low libido, Asexual, sensorotic, or passive homosexual	Medical tests assigned Sex (SRS)
Female *Hubrag*	Complete Male or female, in combination of both	Depends on their inborn Gender observable after puberty	Androgynous depends on gender assigned to them	Depends on the way mind/Gender r/discomfort	Desires relations with normal male as "female"	Medical tests assigned Sex (SRS)
Male *Hubrag*	Complete Male or female, in combination of both	Depends on their inborn Gender observable after puberty	Androgynous depends on gender assigned to them	Depends on the way mind/Gender r/discomfort	Low libido, Asexual, sensorotic, or passive homosexual	Medical tests assigned Sex (SRS)

RESULTS

The purpose of the research was to analyze the impact of inborn gender on personal identity, social identity and sexual identity. The researcher realized that genetic composition does not always predict physical appearance, and similarly physical appearance also does not necessarily predict all other aspects of identity. The degree of personal gender identity runs parallel to the proportion of inborn masculine and feminine gender and this feminine gender determines the patterns of social and sexual identity. Some information about the common types of Hijras in Pakistan are given as under:

Table I
Demographics of Participants

		Age		Age of first cross-dressing		Household Income[1]	
Category	N	Mean	SD	Mean	SD	Mean	SD
Khwaja-Sara	26	45.85	13.84	12.73	10.05	43.46	27.30
Nirban	11	47.64	15.23	16.09	11.40	47.72	23.70
Kasbee	10	46.50	8.32	8.40	4.35	40.00	35.19
Male Malang	14	47.50	7.11	10.14	9.87	47.14	28.46
Zenana	38	41.97	9.94	9.89	6.33	32.77	20.86
Jennerdra	36	46.21	9.48	10.89	10.78	32.95	27.20
Mukhannis	6	40.33	9.73	5.33	9.09	55.00	31.93
Sada Suhagan	16	4985	15.48	11.38	11.56	43.62	27.30
Khoja	12	49.44	16.32	18.91	12.08	37.69	25.13
Others	8	43.44	8.00	8.71	5.77	45.99	21.45
Overall	179	45.03	10.81	10.89	9.09	38.59	26.78
F		1.06	(ns)	1.39	(ns)	1.68	(ns)

[1] Mean income based on income ranges reported by participants on the questionnaire.

The main idea of this study is to define the term *Hijra* (gender dysphoric), identify its diverse types and distinguish between the real and fake *Hijras* of Pakistan. Generally people in Pakistan are neither well versed in, nor willing to recognize the conflicting situation of gender dysphorics. They ridicule them and usually fail, to correctly define their strange manners. Though they are short of adequate information about the causes and variance of gender dysphorics, yet are really very much familiar with *Hijra*, because they see them around and acknowledge them as part of their society. Even the most educated group uses the phrase *Hijra* as an umbrella term for different discrepancies.

The desire to dress in the clothing of the opposite sex is a phenomenon that has existed in every age and culture and was termed as "Transvestism". According to Arsalan (2001) many hijras besides having the feelings of belonging to the opposite sex also desire to cross-dress and believe that they have been given the wrong body, especially the wrong external sex characteristics and they therefore want to be operated upon so that their body looks as much as that of the opposite sex. Harry (1964) coined the word Gender Dysphoria, a term, which has been used more and more in recent years.

It should be noted that the current study and its information support the incredible results related to the conjecture that there will be a great possibility of the prevalence of fake *Hijras* in Pakistan. It is found that in some cases *Muslim Hijras* of Pakistan wear a mask or cover for their deviant sexual needs. These fake *Hijras* are realistic in their recognition that they are not really women; however they wear female clothing, take feminine names and use female pronouns. They prefer their ambiguous status to being men. Kamal (2001) stated that most of them belong to poor families; they join *Hijra* community for their livelihood where they live, cross-dress, dance, sing and beg or become sex workers.

Not all Male-to-female gender dysphorics are true Hijras. Some are rather cross-dressers or men with homosexual tendencies. Like the Western gay scene, their society forms a space in which men with various tendencies and different images of themselves can be together. Hijras could be called "transgender" people who feel a deep need to reject and go beyond their biological sex and social gender roles, something that has existed for centuries in all cultures. Unlike Western "transgender" people, the Hijras are not solitary, invisible fighters but are visible and organized and have been present in society for thousands of years (Blanchard, 1989). Most of them cross-dress for a reason and join *Hijra* community to protect themselves from social rejection. This fake cross-dresser resembles the pseudo transvestite of Benjamin. It should be noted that in Pakistan nowadays, an enormous number of homosexuals and bisexuals pretend to be *Hijras* for deriving sexual gratification the easy way. Islam denounces such fake *Hijras*.

Khawaja-Sara

It is common amongst men; the difference between *Hijra* and *Khawaja- Sara* is that *Hijra* is a person suffering from identity discomfort, while in the case of *Khawaja-Sara* he is not a "classic" effeminate. He is a normal man living forcibly, unwillingly full-time in the gender opposite to their birth sex. Mughal rulers employed *Khawaja-Sara* as caretakers of their harems and were compelled for castration (Reza, 2000).

Nirban

Most respected among the *Hijra* are the hermaphrodites (who are only very few) and the *Nirvan /Nirban* (customary castrated). Fakhar (1993) reported *Nirban* means to have undergone a sacred castration ceremony that turns one into someone who is really neither male nor female. *Nirvana* means extinction of the

self and becoming one of a kind with the supreme spirit. *Hijras* view the operation as a procedure that changes a man into an important being when the maleness departs and is replaced by a new person, someone not male and not wholly female either emerges with a special power. Since law forbids castration, it is performed secretly.

Kushra

Abdul Aziz and Hanafi (1987) reported that in the Indian and Pakistani societies the *Khusras* are visible as female-dressing transgender and intersexuals. In general, their idealized type of behavior would be "ladylike" and, indeed, they usually behave in a very feminine way, which they regard as an expression of their "*Ruh*" (Soul). At the same time they are also allowed to display certain manners and behavior like aggressiveness and rowdiness when offended; the traits considered unbecoming of women in traditional Muslim societies.

Jamaandra

Ibn Abd al-Barrhs (2001) defines *Jamandra* as the one ("male") who carries in his movements, in his appearance and in his language the characteristics of a woman. Abraham (1981) elucidated that there are two types; the first is the one in whom these characteristics are innate and he did not put them on by himself, and there is no guilt, no blame and no shame involved as long as he does not perform any (illicit) act or exploit it for money (prostitution etc.). The second type, acts like a woman out of immoral purposes and he is the sinner and blameworthy.

Mukhannis

Mukhannis are those who want a gender identity that is different from the one they are born with. They hate their male identity and want to be females. *Mukhannis* is a biological male who identifies as a female and desires a change of his biological sex. Koen (1998) distinguishes the *Mukhannis*, as the one who looks physically so much like a woman that he resembles women in his softness, speech, appearance, accent, and thinking. He would have no desires for women and he would not notice anything about them. *Ibn Qudamah* mentioned: "or a *Mukhannath* who feels no desire (towards women) (*Surah 24:31*)". And also Ibn 'Abbas said, regarding the phrase from *Surah 24:31*: "This is the one, of whom women do not feel shy. This is the *Mukhannath* who is without male potency" (*Al-Quran*).

Mukhannas

They are biological males who (would like to) assume a female gender role. According to Wan Azmi (1991) *Mukhannas* are males whose behavior is similar to that of females. *Mukhannas* is one who is effeminate, but does not want to change his sex and he has no desires for women.

Spiritual Hijra

Ahmad (2003) reported that spiritual *Hijras* are quite common. They show up at weddings or birth ceremonies where they are usually invited by families to sing rituals songs. People generally in North India and Pakistan believe in the powers of *Hijra* to bless or curse others. The belief in the *Hijra*' powers to bless or to do "*baad dua'a*" (curse) is still common and people generally respect them for that.

Sada Suhagan

Sada Suhagan is a *Sufi dervish* (person having spiritual powers) visible as female- dressing, who displays a special behavior. In general the idealized type of behavior of such persons would be "ladylike" and, indeed, they usually behave in a very feminine way, which they regard as an expression of their "*Ruh*." Like *Malangiyya- Dervish*. They also have extraordinary inclinations to the *Sufi Order* and the shrines of Muslim saints described by Hayat (2005).

Kliba

Kliba is a male born behaving like a female, who has long hair and is not castrated. Koon (1998) reported that the term *Kliba* is related to the word "*Hich*". The modern word "*Hijra*" is derived from "*Hich*" which means something without a proper place (in the scheme of two sexes, *Hick-gah* means "nowhere")

Brides of God

Mass Shak-i Suhag is especially respected by a special Order of Muslim spiritualists. The *Suhrwardiyya-Suhagaiyya* is a class whose "Male born" members all live the lives of *Hijra* and see themselves as "Brides of God" (Nanda, 1990).

Zenanas

Personal conversation with Hayat, a local *Hijra* (2005) enlightens us about *Zenanas*, as those having their gender feelings to be feminine. They refuse to undergo emasculation. They served as servants or employees in the houses of

noble families and were an important link between the sacred realm of women and the profane realm of men. They are always seen as ideal employees, overlooking all household affairs with the seriousness that they attained because of the distress and feelings of being without the family.

Bantha

A *Hijra* who gives preference to male gender is called *Bantha* explained by Amin Khan (female name Amina) (2006) *Hijras* distinguish *Zenanas* with "Female spirits" and those with "Male spirit" are not considered true *Hijras*. This is however very uncommon among *Hijras*.

True Malang

A person born with both ovary and testicle tissues; this could be two separate gonads (one of each) or a combination of both in one (ovetestes). The genitalia can vary from completely male or female to a combination of both or even ambiguous looking.

Female Malang

A person born with normal female internal organs but with "Masculanized" genitalia. They can appear more male then female or a combination of each. People in Pakistan believe that due to their grave handicap, Allah has granted them a special feature of affecting blessings and curses. People are frightened that some heavenly wrath may befall if they did not oblige these *Hijras*. Quite often, if refused alms by people these *Hijras* abuse and show their private parts and curse them that may Allah make their child a *Hijra* (Nawaz, 2005).

Male Malang

A person is born with testes (usually in the abdominal cavity). The external genitalia are usually female but can be ambiguous. They resembles Male-to-Female transsexual depending on the individual, but quite often they have the full range of cross-gender behaviors, including female dressings and hairstyle, female names, mother-daughter relationships, intersex sex role. They are asexual and are generally considered a third gender- neither man nor woman (Arsalan, 2001).

Namard

A man who feels that he has failed miserably as a man may seek to find an easier life as a female. Riaz (1996) explained that they would discover that there is nothing easy about transition and join *Hijra* community.

Diversity among gender dysphoria

The primary purpose of investigating different types of gender dysphoria was to bring awareness among the general public in Pakistan about the gender dysphorics (*Hijra* -a local name). The researcher intends to explain that the term Gender Dysphoria is not limited to a single type as generally presumed by the people but it implicates many other types and facets.

Misconception about any of this phenomenon, which is not scientifically, empirically or rationally explored, continues to exist for centuries. Although *Hijras* (Male-to-Female gender dysphoric) are ridiculed in our society because of being deviants from the established norms, yet very little is actually known about them. The research therefore was aimed at bringing out facts unknown until now.

Many theorists (e.g. Docter, 1988; McConaghy, 1993; Blanchard, 1989) have suggested that male-to-female gender dysphorics share common motivations for their desire for sex reassignment surgery. The results shows that if this were true, one would expect some clustering of participant on the column indicating their desire for sex reassign surgery. As can be seen in the Figure 1, no single constellation stood out as representing the group at large. This supported the hypothesis that male-to-female transsexuals do not fall into any single category as represented by their personal, social or sexual identities.

CONCLUSION

This paper was aimed at studying the gender dysphorics commonly termed as Hijras in Pakistan and to know their categorization deduced on the basis of their perception about themselves, their hidden and expressed behaviors, the anatomical sex, their desires and their degree of feminine tendencies. All these in variant degrees give us their types and their exact nomenclatures and terminology. Different factors play a role in enhancing the gender dysphoria but religion amongst Muslim *Hijras* control and mould the expressed behavior of these people. The paper aimed at bringing out facts about the gender dysphorics that have remained unknown until now. Certain hypotheses have been supported by the study that can be discussed in details in another paper. The study reveals an array of *Hijras* in Pakistan largely based upon their typical sex organs. In the Indo-Pak sub continent a variety of terms have been used for different classes of *hijras*. There is thus diversity of Hijras to be understood and the misconceptions about them needs to be dispelled.

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MENTAL HEALTH OF THE SPOUSES OF CARDIOVASCULAR PATIENTS

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ABSTRACT

The present research is conducted in order to investigate the mental health of the wives of husbands with cardiovascular diseases and the wives of normal husbands. IPAT ANXIETY and IPAT DEPRESSION scales were administered to 100 wives and they were asked to mention their demographic data. It was hypothesized that wives of husbands with cardiovascular diseases will obtain high State scores on depression and anxiety scales as compared to wives of normal husbands. 100 participants were divided into two groups out of which 50 wives were of the patients suffering from cardiovascular diseases and 50 wives were of the normal individuals. Chi-square test was applied for the statistical analysis of the data. The results of the present study show that the wives of cardiovascular husbands are more depressed ($x^2 = 33.74$, $df = 1$, $p<.001$) and anxious ($x^2 = 33.96$, $df = 1$, $p<.001$) than the wives of normal husbands.

INTRODUCTION

The diagnosis of any threatening disease creates feelings of helplessness, sadness and inadequacy. Cardiovascular disease is a common illness that frightens people and their near ones. It still carries the stigma of death, inability, vulnerability and fear. It is a well known fact that a severe crisis, trauma or terminal illness such as cancer, diabetes or heart disease affects a person emotionally and physically.

According to International Heart Health Conference in Milan (June 2004) Canadian Health Initiative (CHHI) has done marvelous job in the areas of

prevention and management of CVDs. It is a great model for the developing countries.

Nishtar (2002) found that the great increase in rates of cardiovascular disease in developing countries will probably have grave implications for South Asia, which houses nearly quarter of the world's population. Several factors might contribute to this effect, such as increased susceptibility of South Asian people to cardiovascular disease, unrecognized targets for preventive interventions, and restricted access to high-cost tertiary cardiovascular care for economically disadvantaged communities. Cardiovascular diseases are becoming a major health burden in developing countries. In the year 2000, 16.7 million people died from cardiovascular diseases, accounting for 30.3% of all deaths worldwide; more than half these deaths were in developing countries, South Asia (Pakistan, India, Bangladesh, Nepal and Sri Lanka) represents more than a quarter of the developing world, and is likely to be strongly affected by the increases in cardiovascular disease, for several reasons. First, people from South Asia are known to have a high coronary risk; this tendency has been well recorded in studies of expatriate South Asians and has been shown in native settings. Additionally, precise targets for preventive interventions are largely unrecognized for this population. On the other hand, access to tertiary health care is severely restricted because of low availability and high cost. According to World Bank dollar-a-day estimates, of the 1.3 billion people living below the poverty line worldwide, 40% (515 million) live in South Asia, and the gross national product per capita in that region is only US$ 393, compared with $ 1250 for the rest of the developing world.

According to world health report (1999), at the beginning of the 20th century, cardiovascular diseases (CVD) accounted for less than 10 percent of all deaths worldwide. At its end, CVD accounted for nearly half of all deaths in the developed world and 25 percent in the developing world.

Thompson and Pitts (1992) state that when newly weds promise to be committed to their partners in sickness and in health, for better and for worse, the chances are good that eventually this vow will be tested by the care of a chronically ill spouse. The care giving indicates not only the love and concern of the well spouse but also the dependence and helplessness of the ill spouse. Even if the illness does not necessitate long term physical care, well partners may experience considerable stress. In addition to fear associated with the partner's future health and increased depression, two frequently mentioned emotional reactions of well

wives are guilt and some combination of anger and/or resentment. It is significant that well wives face these stressors and negative emotional reactions at a time when they may have lessened social support themselves. This is particularly true when the spouse's primary or only source of emotional support is within the marriage.

Cardiovascular diseases are threatening events for people in Pakistan and all over the world. These illnesses cause stressful situations for normal people; they are also major life stressors causing depression and anxieties in the wives of the Patients.

Mac Vicar and Archbold (1976) explain that the diagnosis of chronic illness in one spouse may take pressure of a troubled marriage and allow the couple to avoid facing problems in the relationship, or it may provide the well spouse with an excuse to avoid his or her problems.

Corbin and Strauss (1984) focus on family resources, in a model of how couples deal with chronic illness; using grounded theory techniques. Their approach examines ways in which couples collaborate and coordinate their activities in order to manage the illness successfully. The concept of biography, trajectory and work help to clarify what couples must go through in order to interact collaboratively. Biography refers to the events, both expected and unexpected, that makeup the substance of one's life. Biographical projections are the goals people have for their future, or the way they expect their lives to proceed. Trajectory of the illness refers to how illness will proceed, the effects it will have on the couple, and the plan of action each has for dealing with the illness. Work refers to the tasks and chores that are necessary to manage the various aspects of the biography, the couple life together and the illness. Chronic illness can be very disruptive to the couple's biographies, both shared and individual. The realities of the situation may dictate that the couple postpone, rearrange or even cancel important plans.

Any illness which is prolonged creates hopelessness in the wives which also affects the capacities and natural functioning of the couple. Anxieties and depressions interfere in normal attitudes of the patients and their wives. It is immaterial as to whether the patient is hospitalized or is being treated at home.

The cardiovascular diseases of the husbands will increase needs for support from wives because of the sufferings of the illness. The husbands may become

overwhelmed with the support needs of the wives when they themselves are experiencing decreased availability of potential support. If the wives were support providers prior to the illness, after the cardiac ailment, it may be difficult for the husbands to bear increased responsibilities.

Wade et al. (1986) and Wellisch et al. (1983) found that care givers providing care for elderly or ill family members suffer from anxiety. Kiecolt-Glaser et al. (1987); and Skelton and Dominian (1973) found that the care givers suffer from low ratings of life satisfaction and self esteem and depression.

Cardiovascular diseases like other chronic diseases carry pain, discomfort and suffering. If the patient is a male and is in the middle age, cardiac illness seriously affects the patient, his spouse, children and close relatives. Fengler and Goodrich (1979) found self reports of worry, frustration and sadness in care givers.

According to Richardson (1940) "the family is part of the individual and the individual is part of the family". Field (1967) describes the fact that the presence of a sick person in the home affects the life of the family, altering both its major aspects and the minutiae of everyday living. No matter how strong the family ties, or how genuine the desire to help the patient the prospect of having a seriously sick person in the home is bound to arouse tensions, fears, and anxieties. Ervin (1973) discusses that for married individuals, it is highly likely that the wives are the primary persons who provide physical care and emotional support to the patient in the long term illness.

Kelley (1981) explains that the spouse of the ill partner takes on more burdens because of the illness and at the same time receives fewer rewards from the partner. The theories suggest that both wives and husbands would be distressed as the result of inequities in the benefits and costs that each incurs in the relationship. The well spouse may be vulnerable to feelings of anger, resentment and lessened commitment to the relationship. The ill partner may experience guilt, fears of being a burden and worries about being deserted. These changes at the given level will be accompanied by changes at the dispositional level.

It is important to have an understanding of the changes in the functioning of the wives that normally accompany hopelessness of dreaded disease. The husband and wife function as a unit, no matter who the identified patient is, the entire

family members will be affected by the disease and in turn have an effect on the adjustment of the other individuals.

The cardiac patients and their wives follow the commands of cardiac diseases and the spouse plays an important part in their adjustment, adopting the prescriptions of the disease and taking on the heavy emotional, physical, social and financial burdens. Cardiovascular disease forces the patients and their wives to change their life styles otherwise they may destroy their normal functioning, tolerance and settled pattern of life.

The cardiac patients and their wives need to plan to gain comfort, satisfaction and happiness. This demands not only time, money and energy but also compromise. The spouse has to compromise on his/her own potential demands. When the husbands feel helpless and inadequate, the problems are multiple. If they were the breadwinners, prior to cardiac ailment, now after the illness they see themselves dependent partially or sometimes fully for those family needs, which they used to fulfill before. The role of husband is modified. Now they are support receivers and the wives are support providers. The wives some times carry the burden of earning and struggle for the integration and survival of the home and family. Now the wives live on a small income cutting down the budget for primary necessities.

Many chronic diseases affect all aspects of a patient's life (Burish & Bradely, 1983; Taylor & Aspin wall, 1990).

Cardiovascular patients have to accept their illness in a realistic way, which is not an easy task. The cardiac patients and their wives not only accept the illness but also its restrictions so that both can live with it. The patients and their wives take time to adjust with the illness. Taylor (1990) states that as in acute diseases, there is a temporary first phase when all life activities are disrupted. Chronic diseases, however, may also carry the need to make intermittent or permanent changes in physical, vocational and social activities.

Anderson et al. (1989) state that sexual dysfunction as a result of illness and/or treatment may occur in patients with hypertension and myocardial infarction. Cardiovascular diseases also affect the spouse's social, physical and sexual life. Burish and Lyles (1983); Doehman (1977); Krantz and Deckel (1983); Maruta and Osborne (1978); Voss et al. (1988) describe that sexual benefits may also be less available. Across a variety of chronic illness, such as coronary heart disease,

stroke, cancer and chronic pain, there is evidence that frequency and satisfaction with sexual functioning decreases in marriages following the onset of the illness.

Alony et al. (1993) conducted an exploratory survey regarding changes in sexual performance in 15 post stroke male patients (aged 31 – 64 years). Patients and partners were interviewed twice; as close as possible to admission and between 6 – 12 months after discharge. At interview they were questioned about desire, erection, orgasm and overall sexual performance. Serum levels of sexual hormones were examined at the same time. The answers of patients and partners matched almost perfectly. The dysfunction was prominent with lesion in the non dominant hemisphere and with hypertension, heart diseases and the use of beta – blockers.

The importance of mental health has always been a primary concern of mankind and numerous references to the subject appear in literature through out the ages.

Mental health is defined by the world health organization (WHO, 1951) as "the capacity of an individual to form harmonious relations with others and to participate in or contribute constructively to the change in his/her social and physical environment".

Ahmad (1993) states that the concept of "adjustment" is mostly used as a criterion of mental health, and depends on an assessment of what a person can achieve in relation to what is expected of him in his normal life. Often this means no more than the degree of conformity to the value of the group and the society in which he lives.

The Wives of cardiovascular patients find less opportunity for their own physical and mental health. Due to insufficient knowledge about mental health in Pakistan the husbands of the wives suffering from cardiovascular diseases are not aware of their emotional problems. They also need their physical and psychological examination. A counselor or a clinical psychologist can suggest them how to manage their problems wisely.

Whether the patients are suffering from angina or are in the stage of post myocardial infarction, the wives may develop hypersensitivity, uneasiness, physical tension, mental confusion and sometimes ambivalence as compared to the wives of normal individuals.

The goal of the present study is to estimate and investigate the effects of cardiovascular diseases on the mental health of the wives of the cardiac patients. This humble attempt also tries to highlight how the severity of these diseases induces depression and anxiety causing damage to mental health of the wives of the cardiac patients.

Lack of knowledge of the disease and the belief that nothing can be done for the patient, who has a cardiovascular disease, affects mental health of the cardiac patients and their wives. It is the responsibility of a Clinical Psychologist to conduct a research on the wives of the cardiac patients.

Pakistan is a country, which is striving for progress and is still in the phase of development. The literacy rate of Pakistani people is not sufficient to meet the needs to have an idea of mental illness and people are unable to understand their emotional problems.

In Pakistani culture husbands and wives are dependent on each other for their basic needs. They share all happiness and sorrow with each other and give love and protection if one of the members is sick. Benokraitis (1996) explains that husbands and wives are expected to love each other and to show a very great affection. They should be chaste and faithful to each other. If the one is sick, pained, troubled, distressed, the other should manifest care, tenderness and compassion.

In the developing countries like Pakistan, wives of cardiovascular patients are not provided the attention by the professionals. The most important issue in this research is the mental health of the wives which is affected after the cardiovascular diseases of their ill husbands.

It is imperative to conduct a research on this important topic because the wives of cardiovascular patients suffer from numerous problems which add to the graveness of their emotional equilibrium.

It is evident from the above mentioned researches and literature review anxiety and depression of wives result in the disruption of mental health of other family members including children and close family members. Hence mental health professionals can aid these families who are in crisis.

It is the responsibility of a qualified clinical psychologist to specify the factors involved in mental health of the wives of cardiovascular patients by the exact statistical evidence. The emotionally disturbed wives can be helped through appropriate psychotherapy.

Hypotheses

In the light of the above theoretical and scientific data following hypotheses are formulated.

1. The wives of the husbands suffering from cardiovascular diseases will obtain high sten scores on IPAT Depression Scale than the wives of the normal husbands.
2. The wives of the husbands suffering from cardiovascular diseases will obtain high sten scores on IPAT Anxiety Scale than the wives of the normal husbands.

METHOD

The present research was conducted to assess the mental health of the wives of cardiovascular patients. In order to analyze it scientifically, the wives of the patients suffering from cardiovascular diseases were compared with the wives of normal individuals. The wives of cardiovascular patients and the wives of normal individuals were matched on the variables of age, education and neighborhood.

Participants

A total of 100 participants were selected for the present research which comprised of the following categories.

a) 50 wives of the husbands suffering from cardiovascular diseases.
b) 50 wives of the normal husbands.

In the category of cardiovascular diseases, myocardial infarction, angina, angioplasty, insertion of pacemakers and heart by pass were included. The patients suffering from cardiovascular diseases were selected from The National Institute of Cardiovascular Diseases Karachi, Zubaida Medical Centre and the cardiac O.P.D /C.C.U at P.N.S Shifa, Karachi. These participants were representatives of all the districts of Karachi. Karachi is divided into four

districts. It is a cosmopolitan city of Pakistan and is known as the mini Pakistan. Hence it can be concluded that the sample is fairly representative of the population of Pakistan.

The normal participants of the present sample were selected from individuals residing in the areas of Sabir Sailors Residential Estate (S.R.E) Pakistan Navy, Clifton and Nazimabad Karachi which are representative areas of the population of Karachi.

Measures

In the present research IPAT ANXIETY (Cattell et al., 1963/ 1967) and IPAT DEPRESSION (Laughlin & Krug, 1976) scales were used to measure the mental health problems of the individuals. Anxiety and depression are operationally defined by the author of these two scales respectively. IPAT ANXIETY and IPAT DEPRESSION scales are objective, reliable and valid assessment tools. These are sufficiently extensive measures of anxiety and depression. Both of these scales are easy to administer and can be easily scored by using a standardized key that is fixed over the booklet. In these scales a forced choice technique is used for responding. IPAT ANXIETY and IPAT DEPRESSION scales consist of multiple choice items which have three possible answers; Yes, No and uncertain. These are appropriate for the age ranging from 15 years and above. In Pakistan, both of these scales are widely used for research and screening purposes. These scales are fundamental in the diagnostic procedures of clinical setting.

Several studies in Pakistan and in other countries have been conducted by using IPAT ANXIETY and IPAT DEPRESSION scales and it has been found that both the scales are reliable and valid outcome measures of anxiety and depression. The validity and reliability of the IPAT DEPRESSION and IPAT ANXIETY scale were examined in Pakistan by Ahmad and Munaf in 1991; 1992 and it was found that both of these scales are highly reliable and valid for the population of Pakistan.

In Pakistan, Ahmad and Munaf (1991) and again Ahmad and Munaf (1992) administered the IPAT ANXIETY and IPAT DEPRESSION scales on the patients registered for psychotherapy in the Institute of Clinical Psychology, University of Karachi, Karachi. According to these studies both of these scales

were administered for the purpose of correlating the overall psychological investigation results.

The diagnosis of anxiety and depression is the same as is used all over the world and it is valid for the population of Pakistan

IPAT Anxiety Scale

Anxiety in a moderate form is helpful for the daily life challenges as it acts as an impetus for appropriate action. When it becomes abnormal and creates hindrance in the daily life it requires proper diagnosis and treatment. In clinical practice, anxiety has been measured by observation, interview and a thorough psychological examination. In order to achieve a valid and reliable measure of anxiety scientifically, the IPAT ANXIETY SCALE was constructed.

The IPAT ANXIETY SCALE was first published by the Institute for Personality and Ability Testing (IPAT) in 1957. This scale is a scientific source of getting clinical anxiety information in a quick, objective and standardized manner. Reliability of this scale is .60 has been reported for a sample of 170 medical students over a two-year period by the Institute for Personality and Ability Testing (IPAT) and The validity of The IPAT ANXIETY SCALE is .90.

IPAT Depression Scale

An accurate diagnosis of depression is very important in clinical setting for effective treatment. IPAT DEPRESSION scale which is the companion instrument of IPAT ANXIETY scale gives an accurate and valid picture of depression. The IPAT DEPRESSION scale was published in 1976 in order to measure depression.

The reliability of IPAT DEPRESSION scale with internal consistency estimates is about .93.The validity of IPAT Depression Scale obtained by IPAT (Institute For Personality and Ability Testing) is a correlation of .88 between the 36-item scale and the pure depression factor in a sample of 1904 normals and clinical cases. The predictive potential of the Depression Scale reflected in this test factor correlation seems eminently satisfactory (the Institute for Personality and Ability Testing).

Procedure

In the present study IPAT ANXIETY and IPAT DEPRESSION scales were used to investigate the impact of cardiovascular diseases on the mental health of the wives. Both scales were individually administered to the wives in a standard manner. Wives meeting the study inclusion criteria were invited to participate. It is important to bear in mind that clinical studies are difficult to conduct in Pakistan due to people's insufficient knowledge about research and psychological testing. Hence, the subjects were explained the importance of the present research and their cooperation was appreciated. The subjects were brought in to a quiet room and were seated comfortably. Rapport was built before administering the scales. The subjects were assured that all information would remain confidential and that it would be used only for research purposes. The participants were fairly conversant with the English language and who were not very fluent asked the author to explain the words in to Urdu. Hence these tests were administered individually in order to help the individuals according to their needs. The available sten scores for males and females were used separately for scoring purposes.

Definitions of the Key Terms

Anxiety
In this study anxiety is defined as the level of scores obtained on the IPAT anxiety scale.

Depression
Depression is defined in this research as the level of scores obtained on the IPAT depression scale.

Sten scores
Stens are standard scores on a 10-point scale (1 through 10).

Cutoff Scores
Obtaining below 7 on IPAT DEPRESSION SCALE AND IPAT ANXITY SCALE indicates normals and above 7 on these scales shows depressed and anxious consecutively.

Statistical Analysis

Chi-square test was used for the statistical analysis of the data, because the variables were not continuous. Hence only the non parametric statistic could be applied.

RESULTS

Hypothesis No. 1:

The wives of the husbands suffering from cardiovascular diseases will obtain high sten scores on IPAT DEPRESSION scale than the wives of the normal husbands.

The results of the statistical analysis are shown in Table I and graph 1. The chi square $X^2 = 33.74$, df = 1, $P < .001$.This indicates that there is a significent difference between the two groups. The wives of the husbands suffering from cardiovascular diseases are more depressed on IPAT DEPRESSION scale than the wives of the normal husbands. Table I and graph 1 also confirm the significance of the hypothesis.

Hypothesis No. 2:

The wives of the husbands suffering from cardiovascular diseases will obtain high sten scores on IPAT ANXIETY scale than the wives of the normal husbands.

The results of the statistical analysis are shown in Table II and graph - 2. The chi square $X^2 = 33.96$, df = 1, $P < .001$. This indicates that there is a significant difference in the two groups. The wives of the husbands suffering from cardiovascular diseases are more anxious on IPAT Anxiety Scale than the wives of the normal husbands. Table No II and graph – 2 also confirm the significance of the hypothesis.

TABLE I
Level of Depression among Wives of Husbands with Cardiovascular Diseases and Wives of Normal Husbands

	Wives of Husbands with CVD	Wives of Normal Husbands	Total
Depressed	38	9	47
Normal	12	41	53
Total	50	50	100

X^2 =33.74, df = 1, P < .001 Level

GRAPH -1
Level of Depression among Wives of Husbands with Cardiovascular Diseases and Wives of Normal Husbands

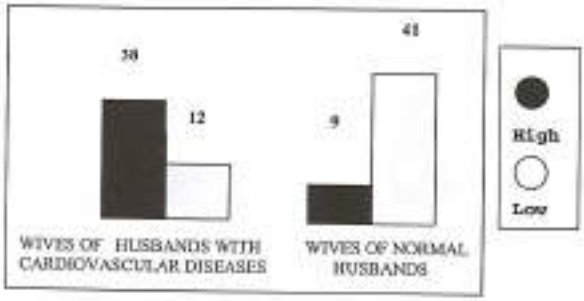
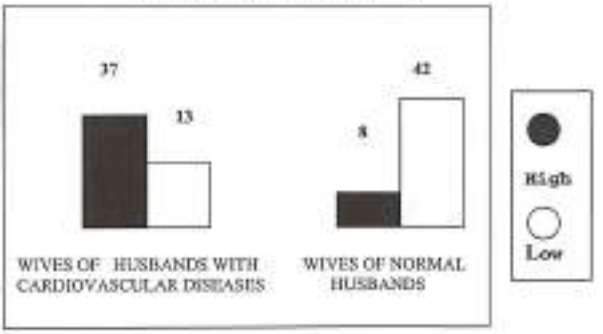


TABLE II
Level of Anxiety among Wives of Husbands with Cardiovascular Diseases and Wives of Normal Husbands

	Wives of Husbands with CVD	Wives of Normal Husbands	Total
Anxious	37	8	45
Normal	13	42	55
Total	50	50	100

$X^2 = 33.96$, df = 1, $P < .001$

GRAPH -2
Level of Anxiety among Wives of Husbands with Cardiovascular Diseases and Wives of Normal Husbands



DISCUSSION

The hypothesis that the wives of the husbands suffering from cardiovascular diseases will obtain high sten scores on IPAT Depression Scale than the wives of the normal husbands, is supported by the data and was highly significant at $P < .001$ level. Table I and Graph 1, clearly indicate that the wives of the husbands suffering from cardiovascular diseases have high sten scores on IPAT Depression Scale than the wives of normal husbands. In our society husbands provide shelter and protection to their wives. The husbands' role in the family is to provide the basic requirements to every one in the home. The wives gain respect, prestige and status through husbands.

In most of the areas of Pakistan, Zamindara system prevails in which the people have their huge areas of land for farming. The property of land shifts within the families of land lords from one generation to the other generation. In case of the husbands' death in these families the wives are pressurized to marry their brother in – laws so that the property does not go out of the family. The wives of these families face problems when the husbands have cardiac illnesses. In the life of their husbands the wives see their brother in – laws as their brothers. Hence it is extremely difficult to adjust to the new circumstances after marrying the brother in – laws. This situation causes anxiety and depression in the wives. This is proved that the bond between the husbands and the wives is threatened in these families.

Usually in the Pakistani family, most of the decisions in the home are made by the male head of the family. Traditionally, the wives accept the dominance of their husbands which is predominant in our culture. Tariq (1987) has also supported this view. If the husband becomes a cardiac patient then the wives face problems and feel that even the minor problems are not handled by them properly. With the result, the wives feel that they are not as efficient as their husbands because the husbands were performing work more prestigiously prior to the illness. So the wives develop the feeling of worthlessness and see themselves as not able to take the full responsibility of the entire family. They feel lonely and hopeless.

Pakistan is different from Western societies. Here the Children are accepted as the responsibility of parents till their career adjustment. If one of the parents is sick, the other plays the role of both the parents. In consequence of the husband's

cardiac illness the wives are worried about the children's careers and settlement in the life. Hence the wives play the roles of their husbands by striving for the welfare and prosperity of the family.

The second hypothesis of the study is that the wives of the husbands suffering from cardiovascular diseases will obtain high sten scores on IPAT Anxiety scale than the wives of the normal husbands.

The hypothesis is supported by the data and was highly significant at $P < .001$ level. Table II and Graph 2 clearly indicate that the wives of the husbands suffering from cardiovascular diseases have high anxiety sten scores on IPAT Anxiety Scale than the wives of the normal husbands.

In Pakistani culture, generally husbands and wives live in the extended family. The wives stay home and look after their children. The wives are expected to do the entire household work and also care for the extended members of the family. The close family members and especially the husbands reinforce the traditional gender roles of their wives in which the wives are submissive and obey their husbands and in-laws. The wives are judged well by their husbands and in -laws by performing the duties efficiently. The wives are under greater pressure because the responsibilities are multiplied during the husbands' cardiac illness. The wives of cardiac patients are deprived of the husbands' support and shared responsibilities. At times the wives are solely responsible for their children's education, career settlement and their marriages as well. This requires special management inducing stress in the wives due to the added responsibilities which were shared by their husbands before the cardiac illness. It is obvious that living in the extended family and caring for a husband suffering from cardiovascular diseases is stressful for the wives.

It is a well known fact that death is an unavoidable and unpredictable event in the life but after having cardiovascular diseases, the probability of death increases. Cardiovascular diseases create additional stress, the wives of the husbands suffering from cardiovascular diseases are fearful for the husbands' lives. The married women have high status in Pakistan. Generally married women have strong ties with relatives and in – laws. For wives the death of the husbands often means not just the loss of a life companion but a complete change of the whole way of their life. The wives cannot express and share their fears with their husbands. Hence the wives suffer from extreme emotional disturbances. The wives are also fearful of loosing their husbands' support.

Usually it happens that when the husbands undergo a cardiac surgery, they have to minimize their professional activities as reported by The American Heart Association (2004). The husbands do not remain as active as they were before the surgical treatment. The husbands' illness and its limitations depress the economic status by interfering with the earning capacity. Their economic stability is disturbed by the daily expenses of the treatment. The basic needs of other family members; children's education and medical attention become difficult to fulfill. Financially, the wives face economical uncertainty. Hence the wives experience frustration, dissatisfaction and helplessness which further adds to their anxiety as reported by Elliott et al. (2000) and Croog and Levine (1977).

The husbands suffering from cardiovascular diseases need constant care, periodic check-ups and intensive medical supervision. In spite of all medical progress and advanced surgical treatment of cardiovascular diseases, the cardiac emergencies still carry the strain for the wives. The wives compromise with these diseases. The life style of the wives also changes from time to time according to the requirements of the cardiac illness. The wives follow the routines of the treatments. The wives' attention is focused on the physician's recommendations. They also follow the physician's advice for their husbands' special diet, exercise and rest. The wives find fewer opportunities and time for their own rest, health and happiness.

For the adequate care of the husbands, the wives usually ignore their own physical and emotional needs. This process later on changes in the defense mechanism of denial. A stage can come when the wives are unable to share their feelings with their husbands. Gradually the wives' anxiety can convert into psychosomatic complaints like headache, insomnia, palpitation, hypertension, or chest pressure. Their emotions and physical signs reveal their disturbed mental health. Some times the wives are unaware of their feelings and are not in a condition to accept their own emotions.

Most of the time, the wives are apprehensive and worried about the husbands' future health and life. At this stage, the wives need a mental health professional who can assess their emotional problems and can counsel them professionally. Due to insufficient knowledge about mental health problems in Pakistan, usually the family members and close relatives cannot understand that the wives of the cardiac husbands also suffer physically and mentally. The wives of husbands suffering from cardiovascular diseases face a psychic trauma for which they need

a clinical psychologist. The wives of cardiovascular patients can be diagnosed by a clinical psychologist and treated accordingly. A mental health professional or a psychotherapist focuses on strengthening the wives and also develops insight into how their husbands' cardiac illness is affecting their mental health. By treating the wives effectively, the other members of the family can also be guided. The wives can gain a basic conceptual understanding of their psychological problems. The clinical psychologist views their problems and helps them in reintegration and problem solving strategies.

RECOMMENDATIONS

In view of the findings of the present study and discussion, following recommendations can be suggested for future research.

1. This research may be conducted on a larger sample in order to get a representative sample of the whole of Pakistan.
2. It is suggested that this study may be conducted on keeping in view the lower and higher socioeconomic status of the participants.
3. The variables age and education may be included in further research.
4. Psychosocial variables may also be considered in future research.
5. Correlation studies of the mental health of the well wives and their cardiac spouses will further help to understand both spouses clearly.
6. A more intensive study of mental health of the wives of cardiovascular patients need to be undertaken to further enlighten the mental health problems related to marital adjustment prior and after the cardiovascular diseases.

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TYPE A BEHAVIOUR AND ITS IMPACT ON THE ANXIETY LEVEL OF PROFESSIONAL WOMEN

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The present study was undertaken to explore the Type A behaviour and its impact on the anxiety level of professional women. The sample consisted 170 professional women belonging to two different professions, namely, teaching and medical. It was hypothesized that anxiety level of Type A professional women will be significantly high than Type B women. The sample of the professional women was classified into Type A and Type B personality on the basis of scores they obtained on the Anjum Khalique Type A Scale (Anjum & Khalique, 1991). The Self Analysis Form (Anxiety Scale; Krug, Scheier, & Cattell, 1976) and Leventhal Scale for Anxiety of California Psychological Inventory(Leventhal, 1966/1968) were used to measure anxiety of the Type A and Type B women. Result showed that Type A women obtained significantly high mean score on both scales of anxiety as compared to Type B professional women. The results confirmed the research hypothesis.

INTRODUCTION

Research on Type A behavior pattern as a new and independent risk factor of Coronary Heart Disease (CHD) was conducted in the 1950s and 1960s (Friedman & Rosenman, 1959, 1974). This research established Type A behaviour pattern as a consistent syndrome of behaviors representing a stress-coping strategy employed by certain susceptible individuals in response to challenging environmental stimuli (Schaubroeck, Ganster & Kemmerer, 1994). Excessive role ambiguity and conflict, work overload, superiors who do not encourage competition and/or participation and poor relationships at work, are all examples of stimuli in the work environment that may elicit behavior consistent with the Type A behaviour pattern (Davidson & Cooper, 1980). The behaviors typical of Type A individuals under stress include *achievement striving, competitiveness,*

time-urgency, hostility, aggressiveness, irritability, and *impatience* (Glass, 1977a, 1977b). People who do not react in this manner to environmental stimuli are known as Type Bs. Further, all individuals are likely to lie on a normally distributed continuum, ranging from extreme Type A behaviour to extreme Type B behaviour (Sparacino, 1979).

Several researchers demonstrate that women assessed as Type A report more anxiety, stress, and tension, poor marital adjustment, more frustration, and more nervousness, poor self esteem, and more emotional distress (Dearborn & Hastings, 1987; Haynes & Feinleib, 2000; Houston & Kelly, 1987). Some researchers have assumed that Type A women may experience more depression and anxiety and exhibit less anger and hostility than Type A men, because it has been less acceptable for many of them to express overt anger toward others. Price (1982) for example, suggest that Type A women may become more depressed rather than hostile or angry. Greenglass (1985) reported significant correlation among managerial women between job-family conflicts and scores on psychological measures such as depression, irritation, and anxiety.

Considerable research has been conducted on the Type A behavior pattern in the west. However, in the developing countries like Pakistan research in this area is quite limited. Thus, we need to explore Type A behavior and its impact on the anxiety level among professional women.

The following hypothesis was formulated:

Type A women will be significantly more anxious as compared to Type B women.

METHOD

Sample

The sample consisted of 170 professional women selected from two different occupations, namely, teaching profession and medical profession. All these women are residing in Peshawar, capital city of the North West Frontier Province (NWFP) of Pakistan. Convenience sampling technique was used to select the professional women according to predetermined criteria, that is, women who were married, had 2-5 children and were residing with their families in Peshawar at the time of study. Demographic characteristics of the sample are shown in the Table I a, I b, & I c.

Table I a
Demographic characteristics of the sample (Education)

Institutions	n	Education				
		BA/BSc	MA/MSc	M. Phil/ Ph. D	MBBS	FRCS
Colleges (N)	31	—	19	12	—	—
%	(18.2)		(61.2)	(38.7)		
Schools (N)	61	21	40	—	—	—
%	(35.8)	(34.4)	(65.5)			
Hospitals (N)	78	—	—	—	66	12
%	(45.8)				(84.6)	(15.3)

Table I b
Demographic characteristics of the sample (Age)

Institutions	n	Age in years				
		30-35	36-40	41-45	46-50	51-55
Colleges (N)	31	4	7	6	8	6
%	(18.2)	(13.0)	(22.5)	(19.3)	(25.8)	(19.3)
Schools (N)	61	15	13	10	14	9
%	(35.8)	(24.5)	(21.3)	(16.3)	(23.0)	14.7)
Hospitals (N)	78	14	12	17	19	16
%	(45.8)	(18.0)	(15.3)	(21.8)	(24.3)	(20.5)

Table I c
Demographic characteristics of the sample (Number of Children)

Institutions	n	No. of children			
		2	3	4	5
Colleges (N)	31	10	18	31	5
%	(18.2)	(32.2)	(58.0)	(100)	(16.1)
Schools (N)	61	9	6	11	16
%	(35.8)	(14.7)	(9.8)	(18.0)	26.2)
Hospitals (N)	78	19	37	8	—
%	(45.8)	(24.3)	(47.4)	(10.2)	

Table I a shows that out of 170 professional women, 18.2% were from women colleges, 35.8% from the higher secondary schools and remaining 45.8% were selected from hospitals. The age range of the sample (Table I b) varied between 30 to 55 years, but majority of them fall in the 46-50 years (25.8%). There were

58.2% professional women who had two/three children whereas, 41.7% women had four/five children (Table 1 c). The sample comes from joint family system.

Instruments

Personal Information Schedule

It was designed to collect demographic information that is, age, education, occupation, number of children, basic pay scale, family structure (nuclear/joint) and residential area.

Anjum-Khalique Type A Scale

Type A Scale is an indigenous scale developed by Anjum and Khalique (1991) at the Department of Psychology, University of Karachi. The scale is designed to measure behavioral style of Type A people. The scale contains 12 pairs of statements designed to assess competitiveness, time urgency, and aggressiveness/hostility. Each pair has one item characteristic of Type A people whereas, the other item is characteristic of Type B people. The subject is asked to choose one item from each pair. The higher the score the more the subject has Type A personality. The maximum score on the scale is 12. Score may be divided into low (1-4 scores), average (5-8 scores), and high (9-12 scores), Type A people. The reliability of the test was determined using temporal stability and internal consistency methods. Temporal stability was assessed by administering the scale twice on 200 and 150 students with an interval of three and five months between two sessions. The correlations computed were .74 and .66. Internal consistency was determined using Kuder-Richardson method (K.R. formula 20) on the scores obtained by the same sample. The computed index of reliability was .81 and .73.

Self Analysis Form

The Self Analysis Form was developed by Krug, Scheier and Cattell (1976) at the Institute for Personality and Ability Testing (IPAT) in USA. The scale measures anxiety level and is appropriate for chronological ages of 14 to adulthood. The instrument contains 40 items. Each item has three possible alternatives, that is, *true, undecided* and *false*. The subject is required to answer each item by choosing one of the three responses. Raw score of the respondent is converted into sten score. High sten score

indicates high anxiety level and low score suggests low anxiety level. The test was first published in 1957 included best 40 anxiety items among several thousands personality items which had been examined upto that time by Cattell (1974). The scale showed a test-retest reliability of .70. The test correlated significantly with Taylor Manifest Anxiety Scale (r - .70), State Trait Anxiety Inventory, (r - .76) and S-R Anxiety Test (r - .54). It has been translated in numerous languages. Riaz (1980) translated the test in Urdu. Later on its was modified by Riaz (2002). In the current study the investigator used the Urdu version of Self Analysis Form prepared by Riaz (2002). Both translations used committed approach.

Leventhal Scale for Anxiety (Anx) of the California Psychological Inventory, Form 434:

Anxiety (Anx) is one of the special purpose scales derived from CPI. It was developed by Leventhal (1966, 1968) as a parallel to anxiety scales on other tests such as the MMPI. Correlations between the original and form 434 versions of Anx were .92 for men and .93 for women, in the basic norm samples of n = 3,000. Adjectival descriptions such as complaining, evasive, nervous, and tense are associated with high scores, and descriptions such as contented, optimistic, cheerful, and self-confident with low scores.

Procedure

The researcher visited each institution and individually contacted the women. Each professional woman was contacted according to the time and venue scheduled. The Anjum Khalique Type A Scale was administered to classify women into Type A and Type B personality. Later, the Self Analysis Form (Krug, Scheier and Cattell, 1976) and Leventhal Scale for Anxiety of the CPI (Leventhal, 1966, 1968) were administered to each subject. Each test was administered in an individual setting and according to the standard procedure. Responses were noted down by the researcher.

RESULTS

The results obtained from the analysis of the data show significance difference between Type A and Type B professional women ($P < 0.0001$) on Self Analysis Form (Anxiety Scale) and Leventhal Scale for Anxiety.

TableII
Reliability of the instruments

Instruments	Alpha coefficients
Self Analysis form (Anxiety Scale)	.8410
Leventhal Scale for Anxiety of CPI	.8110

Table II shows reliability obtained by the internal consistency technique for the present study. The results reveal that alpha coefficient computed for the Self Analysis Form is .8410 and for Leventhal Scale for Anxiety is .8110, which are quite high. The Validity of the Self Analysis Form (Anx) and Leventhal Scale for Anxiety was determined by item-sum correlations. The correlations range from .614 to .944 ($P < .01$) and .592 to .895 ($P < .01$).

Table III
Mean difference between Type A and Type B professional women on the Self Analysis Form (Anxiety Scale)

Personality Type	n	M	SD	SEM	t-Value	Sig. (2-tailed)
Type A	71	6.31	0.86	0.10	28.38	.000
Type B	99	2.43	0.89	0.02		

Table III demonstrates that Type A women have obtained significantly higher mean score as compared to Type B on Anxiety Scale. These results suggest that anxiety level of Type A women is significantly higher than the Type B women.

Table IV
Mean difference between Type A and Type B professional women on the Leventhal Scale for Anxiety

Personality Type	n	M	SD	SEM	t-Value	Sig. (2-tailed)
Type A	71	14.36	2.68	0.14	16.81	.000
Type B	99	9.02	1.41	0.10		

Table IV also reveals significant difference between Type A and Type B professional women. From these results it can be safely assumed that Type A woman seem to be more anxious as compared to Type B women.

DISCUSSION

The present study was designed to examine the Type A behavior and its impact on the anxiety level of professional women. The results show that there is a significant difference between Type A and Type B professional women in term of anxiety. Numerous researchers have reported that women who exhibit Type A behavior pattern experience more anxiety and depression as compared to Type B (Kelly & Houston, 1985; Houston, & Kelly, 1987; Davidson, Cooper & Chamberlain, 1980). Suls and Choi (1988) studied relationship between Type A behavior and anxiety, depression and neuroticism. They found that Type A behavior was positively correlated with these psychological disorders. Byrne and Rosenman (1986) also found a positive correlation between Type A behavior pattern and measures of anxiety.

DeGregorio and Carver (1980) examined relationship between ratings of masculinity and depression in Type A subjects. Their results revealed that women who were highly masculine reported higher self esteem and less depression whereas, those who were more feminine experienced more anxiety, depression, and lower self-esteem. Thoresen and Ohman (2000) reported that some degree of anxiety and depression always exist within Type A behavior pattern. Several researchers have reported that Type A individuals hold some beliefs and attitudes that lead to fear, depression, and anxiety that play a role in maintaining Type A behavior pattern (Sibilia, Francioni, Borgo & Acra as cited in Strube, 1991). Some researchers have assumed that Type A women experience

more depression, anxiety, and exhibit less anger and hostility than Type A men. Price (1982), for example, suggests that Type A women may become more depressed rather than overtly hostile or angry. This perspective is similar to some psychoanalytic observers who have argued that feelings of anger and hostility often may be experienced as anxiety and depression (Menninger & Menninger, 1936; Alexander, 1990). Haynes and Feinleib (2000) studied relationship between work and CHD in women. Their results revealed that women who were Type A and were prone to CHD experienced more depression and anxiety and exhibited less anger and hostility. Similar results were reported by Booth-Kewley and Friedman (1987).

The results of the present study demonstrate that Type A professional women are more anxious than their Type B counterparts. An explanation of these findings can be found in Type A woman's expectations of herself. Pressure to perform on the job is greater for Type A women, given her professional achievement orientation. Demands associated with spousal and parental roles probably also contribute to Type A behavior. Clearly, combination of parental role with that of professional role involves a considerable commitment on part of the women both in terms of energy and time. In attempting to meet all of these demands, Type A women experiences greater time pressures and as a result greater anxiety and depression.

Similar results were obtained in the present study. Based on these findings, we conclude that Type A professional women experience more anxiety as compared to Type B women.

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THE ROLE OF PRODUCT DESIGN IN CONSUMER CHOICE OF A PRODUCT

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ABSTRACT

The purpose of the present research was to study the role of product design in consumer choice of a product. After detailed literature review it was hypothesized that consumer choice of a product would be affected more by product design as compare to its price. A sample of 80 students of middle socioeconomic status was selected from University of Karachi. Among them 40 were male students and 40 were female students. The age range of the sample was 20 – 30 years and their educational level was at least intermediate. The Consumer Choice Questionnaire (Self-designed) was administered to assess the role of product design. Descriptive statistics was applied to evaluate and comprehend the results. It was found that (63.75%) consumers are more likely to choose a product due to its design (Physical attributes) as compared to its price (36.25%). The results were consistent with the hypothesis regarding the effect of product form upon consumer choice.

INTRODUCTION

The physical form or design of a product is an unquestioned determinant of its marketplace success. A good design attracts consumers to a product, communicates to them, and adds value to the product by increasing the quality of the usage experiences associated with it. Marketing scholars agree that the term "product" can be applied to a wide variety of goods and services, both tangible and intangible, and all of which are designed. A product's form represents a number of elements chosen and blended into a whole by the design team to achieve a particular sensory effect (Hollins & Pugh, 1990; Lewalski,

1988). Designers make choices regarding characteristics, such as shape, scale, tempo, proportion, materials, color, reflectiveness, ornamentation, and texture (Davis, 1987; Kellaris & Kent, 1993). Designers also decide how to mix these elements and determine the level of congruity that should exist among them.

The most fundamental characteristic of a product is its exterior form or design. Recently, the art of product design has experienced a renaissance. Since the 1930s product design has been more creatively and strategically employed to gain advantage in the global marketplace (Berkowitz, 1987; Nussbaum, 1988).

In one survey of senior marketing managers, design was mentioned as the most important determinant of new product performance by 60% of respondents; only 17% considered price most important (Brace & Whitehead, 1988). Similarly, an analysis of the performance of 203 new products revealed that product design was the most important determinant of sales success (Cooper & Kleinschmidt, 1987).

Marketers charge designers with the task of developing products that have appealing forms. Yet, attempts to produce goods with attractive forms are nothing new. Nearly all civilizations have decorated functional objects such as pottery, weapons, and clothing (Becker, 1978). In modern society, aesthetic sensibilities are relevant to all products, regardless of their function (Holbrook, 1980; Holbrook & Anand, 1992; Holbrook & Zirlin, 1985). According to Nussbaum (1988) it has been found that when given the choice between two products, equal in price and function, target consumers buy the one they consider to be more attractive.

The form or design of a product may contribute to its success in several ways. First, in cluttered markets, product form is one way to gain consumer notice (Berkowitz, 1987; Dumaine, 1991; Jones, 1991). With new product offerings, distinctive design can render older competitors immediately obsolete and make later competitors appear to be shallow copies (Midgley, 1977). Second, the form or exterior appearance of a product is important as a means of communicating information to consumers (Nussbaum, 1993). Product form creates the initial impression and generates inferences regarding other product attributes in the same manner as does price (Berkowitz, 1987). Third, in addition to managerial considerations, product form is also significant in a larger sense because it effects the quality of our lives. The perceptions and usage of beautifully designed products may provide sensory pleasure and stimulation. In contrast, objects with

unattractive forms may evoke distaste. Essentially an applied art, product design has a greater impact on our daily lives than do other art forms, because we use products every day (Lawson, 1983). Fourth, product form can also have long lasting effects. Although many goods are quickly discarded, the aesthetic characteristics of more durable products can have an impact for years on users and non-users alike as products become part of the sensory environment, for good or bad (Pye, 1978; Jones, 1991).

The product form, once developed, may elicit a variety of psychological responses from consumers. These psychological responses include both cognitive and affective components. Bitner (1992) notes that cognitive and affective responses interact and may occur simultaneously.

The form of a product effects consumers' beliefs about the product and brand (Bitner, 1992; Solomon, 1985). Product form may create or influence beliefs pertaining to such characteristics as durability, dollar value, and technical sophistication, ease of use, sex role appropriateness, and prestige. Designers often choose particular form elements to proactively encourage the creation of desirable beliefs (Berkowitz, 1987). However, some consumer beliefs resulting from design elements can be completely unanticipated. A particularly handsome design, capable of winning awards may lead target consumers to infer that the product is expensive and inappropriate for their evoked set. In addition, product liability suits often result from consumer misperceptions of appropriate product use, which are based on design cues (Dungworth, 1988).

There is some debate whether product-related beliefs derive from holistic visual perceptions of the product's form or from linear processing of one design element at a time (Durgee, 1988). In support of holistic processing, Gestalt psychologists argue that objects are perceived as a whole rather than atomistically (Ellis, 1950; Jones, 1991; Katz, 1950). One way to resolve these two perspectives is to assume that both Gestalt and atomistic processing occur. The product may first be perceived as a whole. If the form warrants further processing, then individual elements may become salient. For example, a consumer encountering an upholstered chair may first consider the object in its entirety. Among consumers who find the style sufficiently engaging, there may be further attempts to analyze the appearance of the chair. Consumers may process design elements, such as scale, fabric, square versus T-cushions, skirt versus feet, and back height, individually when contemplating the design.

Perceptions of a product's form evoke several affective responses from consumers. In some cases, product form perceptions can lead to a moderately positive response such as simple liking, or they can evoke stronger aesthetic responses similar to those for works of art. Aesthetic responses are formed on the basis of intrinsic elements of the stimulus, and they encompass strong attention and involvement (Lewalski, 1988; Veryzer, 1993).

Aesthetic responses are typically associated with positive affect and pleasurable experiences. The goal of product design is to elicit more positive than negative responses among consumers, especially those in the target segment. These affective responses may be in response to the overall form (i.e., Gestalt processing) or may relate to individual design elements (Bloch & Richins, 1983).

Psychological responses to design lead in turn to behavioral responses. Behavioral responses to product designs can be considered along an approach-avoidance continuum. When a particular form elicits positive psychological responses, the consumer will tend to engage in approach activities, such as extended viewing, listening, or touching of the product. Approach responses are part of the aesthetic experience and indicate a desire for deeper exposure to the product's pleasing form (Csikszentmihalyi & Robinson, 1990; Mehrabian & Russell, 1974). Approach behaviors also include seeking information about the product and willingness to visit retailers selling the product.

Avoidance behaviors are an outgrowth of negative feelings about a design (Bitner, 1992; Donovan & Rossiter, 1982; Mehrabian & Russell, 1974). When a product form elicits negative beliefs and affect, the consumer may distance him or herself from the object. Such products are unlikely to be extensively viewed or persuade.

The main objectives of the study is to investigate whether the consumer influences more from product design, its attributes (i.e., color, shape, size, packing etc.) than its price. Keeping in view the literature review the following hypothesis was framed:

- Consumer choice of a product would be affected more by product design than its price.

METHOD

Sample

The sample of the present research consisted of 80 individuals. Both male and female were taken in equal number in each group. The sample was taken from University of Karachi. The entire sample was being drawn from middle socioeconomic class. Socioeconomic status of the families of the adolescents was determined on the basis of Household Income and Expenditure Survey by the Federal Bureau of Statistics (FBS) Government of Pakistan (April 2001). The age range of the participants was from 20-30 year, and their educational level was at least intermediate.

Description of Measures

Demographic Information

Personal information was obtained through items which focusing the subjects' age, gender, education, and monthly income of family (Appendix A).

Consumer Choice Questionnaire

Consumer Choice Questionnaire was developed on the basis of Davis (1987); Kellaris and Kent (1993) defined criteria (i.e., Designers make choices regarding characteristics, such as shape, scale, tempo, proportion, materials, color, reflectiveness, ornamentation, and texture) including items regarding consumer's choice based on product's physical attributes (Appendix B).

Procedure

The sample of the research was selected from University of Karachi. They were approached individually. After getting consent from subjects, they were briefed about the purpose of the present study and were assured that the data will purely be used for research purpose and their identities will not be revealed to any one. First of all, with the help of examiner personal information form was filled which focused on the subject's age, gender, education and socioeconomic class. Then brief instructions about Consumer Choice Questionnaire were given to them. They were asked to fill them.

Scoring and Statistics

After data collection the test sheets were scored according to the standard procedure. Frequency distribution and Percentage methods of descriptive statistics were applied.

Operational definition of various terms

Product Form or Design
Product form or deign is the exterior appearance or beauty of the product regarding physical attributes such as Color Shape, Size, Scent, Packing, and Writing texture.

Consumer Choice
Consumer's buying behavior regarding a product.

Price
Price for buying a product.

Middle Socioeconomic Status
Household having a monthly income of Rs. 14,000 to Rs. 30,000, this group has a lesser amount of expenditure on food and spends more on personal appearance and education as compared to the lower socioeconomic group (Federal Bureau of Statistic, April 2001).

RESULTS

Table 1
Percentage of Respondents' Preference for Product design (Physical Attributes) and Price

Variables	No. of respondents	Percentage
(1)Product Design (All Physical Attributes)	51	63.75%
a) Color	4	7.84%
b) Shape	2	3.76%
c) Size	6	11.76%
d) Scent	19	37.25%
e) Packing	13	25.49%
f) Writing Texture	7	13.72%
(2) Price	29	36.25%

DISCUSSION

Hypothesis is supported by data. It is clear from table I that 63.75 % of people purchase a product due to its physical attributes and 36.25% of respondents purchase due to its price. About physical attribute it is noted that most of the respondents were influenced by physical attribute of scent and packing i.e. 37.25% and 25.49% respectively. Very few respondents (3.76%) make their choices on the basis of product's shape. These findings shows that in our culture most of the consumers give importance to scent (smell) of a product may be due to the fact that it makes them fresh and give pleasure. Another reason is that some people are more sensitive towards the smell of any product they use. If marketers consider consumer's choices while manufacturing their products then they can satisfy them and also enhance their business. Time has been constantly changing now-a-days in our society and people give more attention to their status, their physical appearance, they more likely to spend their money on their personal needs, as they feel more satisfied. They feel more confident while interacting with others. So they give more preference to design of the product as compare to its price, while purchasing it. These findings are consistent with the previous research by Frontiers (1996) who found that 73 % of purchase decisions are made at point of sale; the design of packaging must play a key role at point of sale. The pack design is the "salesman on the shelf" (Pilditch, 1972). Other researches found that the role of pack design changed with the move to self-service (Danger, 1987; Behaeghel, 1991), and the pack became an essential part of the selling process (Danton, 1990). It is suggested that packaging may be the biggest medium of communication (Behaeghel, 1991; Peters, 1994). It has been found by Hall (1993) that the design of the pack itself may be an incentive to buy. Researches regarding attributes of product found that the color of a product may influence expectations about the characteristics of the product. The shape can also influence the perceived volume or weight of products (Holmberg, 1983). In contrast in the present study consumers give least preference to the shape of a product.

Several researches shows that consumer spent a bit of time reviewing their choices, looking at each brand and its features and benefits, comparing prices, noting packaging, and evaluating the look and feel of each product. And then they made their choice. More and more, companies are discovering that consumers are choosing products based not just on brand or price, but also on design appeal. Simply put, aesthetics are increasingly a crucial driver of sales.

Consumers increasingly make purchasing decisions based on how products make them feel. In a crowded marketplace aesthetics is often the only way to make a product stand out.

Research shows that over 70% of consumer decisions are made at the retail shelf, meaning packages must be updated regularly to keep the product image fresh and generate sales value in order to stand out among the competition and entice the consumer to make the purchase.

CONCLUSION AND SUGGESTIONS

Given such a dizzying array of product and package choices, it is no surprise that many consumers simply make their decisions based on the product's visual appeal. To enhance their competitiveness, consumer marketing companies should improve their design processes and capabilities to produce products and packages that offer maximum consumer appeal. They must create products and packaging that are not only visually appealing, but also offer features and functionality preferred by consumers. Clearly, innovative design is critical to the new product development process. Consumer marketing companies should include the consumer throughout the entire design process and adapt design concepts to changes in consumer preference and they should recognizing that the voice of the consumer is the single best source of input in creating successful new products and packages.

Keeping in view the limitations of the present research, a few suggestions for future research are:

1. First of all it is suggested that further research should be undertaken in this field, because the research was conducted in short period of time and it dealt with the problem of selecting the sample of middle class people. So the research should be conducted on different socioeconomic classes.

2. Large sample size should be taken; nationwide data should be collected. Sample should be selected for proper representation of the population in different samples of varied populations so that their views can also be analyzed.

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APPENDIX A

DEMOGRAPHIC DATA FORM

SEX _____

AGE _____

EDUCATION _____

MONTHLY INCOME OF FAMILY _____

APPENDIX B

CONSUMER CHOICE QUESTIONNAIRE INSTRUCTIONS

This questionnaire consists of Physical Attributes of a product. After reading statement, circle the number (a-f)next to the statement which best describes the way you feel about the attributes of the product or you considers its price while buying. Be sure to read all the options before making your choice.

I prefer while buying a product (e.g., shampoo)

1) Physical Attributes

   a. Color
   b. Shape
   c. Size
   d. Scent
   e. Packing
   f. Writing Texture

2) Price

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DETERMINING THE TRAIT FAVORABILITY OF THE URDU VERSION OF 300 ADJECTIVE CHECK LIST

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ABSTRACT

The purpose of the present study was to obtain trait favorability of the Urdu version (Haque, 1982) of 300 Adjective Check List (ACL) originally developed by Gough and Heilbrun (1965) as rated by Sindh University students. The ACL contains both negative and positive adjectives, expressing those qualities, which seem to be more or less essential for describing human personality traits. The study was designed to investigate the favorability of each adjective more systematically. A precise estimation was made by obtaining subjects' ratings the favorability of each adjective on a 5-point scale and subsequently by determining a mean value of each item of the ACL.

INTRODUCTION

The Adjective Check List (ACL: Gough & Heilbrun, 1965, 1980, 1983) consists of three hundred English adjectives chosen by psychologists in an effort to build an item pool which would embrace the major variations in human personality and behavior. The ACL provides a method for describing "What people are like"?, an issue of central concern in much psychological research. Representative item of the ACL are: capable, confident, dependent, helpful, responsible, sulfish and so on. Gough and Heilbrun (1965) noted that the 300-word ACL is an emergent from the language itself, past study, intuitive and subject appraisal, empirical testing, and a three-year over all evaluation.

The goal of 300 adjectives of ACL is to present a collection of descriptive terms, covering the widest possible range of behavior, self-conceptions, and personal values. The adjective checklist is organized in such a way that it can be filled in by subject himself or by an observer who records the reactions of the subject.

Adjectives themselves are the natural language of descriptions, and are responded easily be persons. The ACL method is versatile. The item pool of the Adjective check list may be used to obtain descriptions of, for example, the self, an ideal or recollected self, others, historical personages, hypothetical persons, commercial products, geographical places, movies and television shows, religious sects, political leaders, occupational groups, social stereotypes, paintings, books, spouses' views of each other and of what they want each other to be and even of abstract concepts such as venality, wisdom, personal soundness, and old age. Another aspect of the versatility of the ACL method is the variety of ways in which the results obtained from a particular way may be summarized. The basic postulate of the ACL is that every language has an adjectival class of words, used to characterize the self, experience and the objects of experience. The ACL is a systematized and structured technique for capitalizing on these universal of natural language (Gough, 2000).

The first manual for the ACL was published by Gough and Heilbrun in 1965 and the most recent in 1983. Excellent translations of ACL are available in more than 35 languages including Urdu (Haque, 1982) and Sindhi (Parveen, 1999). The ACL has been used in large-scale studies of topics such as conceptions of femininity and masculinity, aging, and national stereotypes, examples of other recent applications include studies of creativity leadership, prejudice, consistency and change of personality over the life span, differences in personality among American presidents, feelings of efficacy among women, perceptions of teachers and students about themselves and each other, academic performance in college, and self-views of effective managers.

The cross-cultural applications of the Gough and Heilbrun Adjective Check List was studied and found that the ACL is a broad range instrument with considerable pledge as a general cross-cultural tool (Williams & Best, 1991). Thus, to ask subjects to report persons by the application of adjectives should be a familiar and psychologically meaningful task in the most cultural settings. Furthermore, the checklist method avoids some problems which may occur in the cross-cultural use of psychological measuring methods, such as variations among groups in the use of extreme categories on rating scales (Triandis, Vassiliou, Vassiliou, Tanaka & Shanmugam, 1972). The simple format also allows the researcher to collect a large amount of data in a relatively minimum period of time.

The ACL is frequently administered as a personality assessment research technique. The items of ACL represent a careful attempt to assemble words that seem useful in the description of human personality traits, and allow distinction in human personality and behavior. Gough (2000) reported that the self-descriptions on the ACL are scored for thirty seven scales, classified under five rubrics: (I) mode of dealing with the task; for example, the total number of adjectives checked; (2) expressed needs such as for achievement, autonomy, dominance, and order;(3) specific attributes such as self-confidence, self-control, and creative temperament; (4) scales for the five ego states of transactional psychology, and (5) scales for the four quadrants in Welsh's theory (1975) of origence and intellect as basic motivators of human behavior.

Many Psychologists have conducted a variety of researches applying the ACL in different cultural setting (for example, Williams and Best, 1977, 1982, 1983, 1990, 1991; Williams, Best and Saiz, 1991; Williams, Saiz and Munick, 1991; Williams and Williams, 1980; Williams, Pandey, Best, Morton and Pandey, 1987; Welsh, 1975; Bem, 1975; Bennett, 1973; Fowler and Riet, 1972; Jenkin, and Vroegh, 1969; Spence, Helmreich and stapp, 1974; Shah, 1999; Parker, 1969; Parveen, 2005; Parveen and Haque, 2002).

In viewing the potential utility of the ACL item pool and its generality of across research situations, the current study was conducted to determine the trait favorability of the Urdu version of ACL for detecting the most favourable and unfavorable traits to describe the personality and behavior of someone in Sindh.

METHOD

Sample

The sample studied in the present study consisted of 160 adults including 80 male and 80 female graduate and masters students of Sindh University. The sample was selected through random sampling technique from various departments of Sindh University. The mean age of the male and female students was 24.3 and 23.9 respectively. According to socio-economic status 25% of all students belonged to upper class, 62.5% to middle class and 12.5% to lower middle class families. Most of them were Muslims.

Procedure

In the present study, the Urdu version of 300 Adjective Check List was presented to both male (n=80) and female (n=80) subjects who participated in this study. They were asked to think over each adjective and judge its favorability along a five-point scale. On five-point scale, position 1 was defined as "quite unfavorable", position 2 was "unfavorable", Position 3 was "moderately favorable", position 4 was "Favorable" and position 5 was "quite favorable". The subjects were requested to rate the each adjective of the ACL on rating scale. The following instructions were given to the subjects:

'We use different types of negative or positive characteristics to describe human personality. Following sheet contains a list of 300 adjectives in Urdu which are sometimes used to describe person's traits. The actual purpose of this study is to ask you to rate the "favorability" or "un favorability" of each of the adjectives. For your convenience, we are giving a "5 points scale" along with each adjective ranging from number 1 to 5. If the one of the following adjectives is "quite favorable" for you, then rate 5, if "favorable", then rate 4, if "moderately unfavorable", then rate 3, if "unfavorable", then rate 2 and if "quite unfavorable" then rate 1 to indicate your personal opinion'.

Scoring and Statistical Analysis

The separate mean scores for both males and females were calculated. The mean favorability scores were compared across genders. The results reveal insignificant difference between the two genders on their overall mean favorability scores; thus their results were combined for further analyses. Mean favorability scores for each trait were calculated. Fifteen most favorable item and fifteen least favorable items were screened, taking care that for most favorable items the lower limit of mean should not be less than 4.49; and for least favorable items the upper limit should not exceed more than 1.49.

RESULTS

Table 1
Means, S.D. and t-value of Favorability Scores for Male and Female subjects on the ACL

	Mean	Std. Dev	t	p
Male (N= 80)	3.07	1.18		
Female (N= 80)	3.04	1.17	0.11	p>.05

Table II
Combined Mean Favorability values of 300 items obtained from 160 Male and Female Subjects on the ACL

Sl#	Adjectives	Mean Values	Sl#	Adjectives	Mean Values	Sl#	Adjectives	Mean Values
1.	Absent-minded	1.71	57.	Commonplace	3.04	73.	Easy-going	2.43
2.	Active	4.38	58.	Complaining	2.80	74.	Efficient	2.88
3.	Adaptable	4.21	59.	Complicated	2.11	75.	Efficient	4.54
4.	Adventurous	4.19	60.	Conceited	2.02	76.	Egotistical	2.07
5.	Affected	2.52	61.	Confident	4.50	77.	Emotional	2.52
6.	Affectionate	4.54	62.	Confused	3.16	78.	Energetic	4.08
7.	Aggressive	3.04	63.	Conscientious	4.59	79.	Enterprising	4.40
8.	Alert	4.64	64.	Conservative	3.23	80.	Enthusiastic	4.02
9.	Aloof	2.76	65.	Considerate	5.08	81.	Evasive	1.85
10.	Ambitious	4.52	66.	Contented	4.09	82.	Excitable	1.69
11.	Anxious	3.00	67.	Conventional	3.40	83.	Fair-minded	4.40
12.	Apathetic	1.88	68.	Cool	4.33	84.	Fault Finding	1.50
13.	Appreciative	4.28	69.	Cooperative	4.64	85.	Fearful	1.87
14.	Argumentative	4.09	70.	Courageous	4.78	86.	Feminine	2.16
15.	Arrogant	1.42	71.	Cowardly	1.61	87.	Fickle	1.85
16.	Artistic	4.33	72.	Cruel	1.19	88.	Flirtatious	1.47
17.	Assertive	3.38	73.	Curious	3.28	89.	Foolish	1.66
18.	Attractive	4.47	74.	Cynical	2.07	90.	Forceful	3.11
19.	Autocratic	3.07	75.	Daring	4.26	91.	Forthright	4.40
20.	Awkward	1.45	76.	Deceitful	1.14	92.	Forgetful	2.21
21.	Bitter	1.38	77.	Defensive	4.11	93.	Forgiving	4.38
22.	Blustery	1.28	78.	Deliberate	4.61	94.	Formal	2.85
23.	Boastful	1.33	79.	Demanding	3.28	95.	Frank	4.61
24.	Bossy	1.97	80.	Dependable	4.38	96.	Friendly	4.85
25.	Calm	4.35	81.	Dependent	2.89	97.	Frivolous	2.19
26.	Capable	4.61	82.	Despondent	1.71	98.	Fussy	1.54
27.	Cautious	1.88	83.	Determined	4.61	99.	Generous	4.28
28.	Cautious	4.21	84.	Dignified	4.71	100.	Gentle	4.69
29.	Changeable	1.92	85.	Discreet	2.78	101.	Gloomy	2.00
30.	Charming	4.45	86.	Disorderly	1.47	102.	Good-looking	4.33
31.	Cheerful	4.43	87.	Dissatisfied	1.95	103.	Good-natured	4.64
32.	Civilized	4.83	88.	Distractible	2.09	104.	Greedy	1.19
33.	Clear-Thinking	4.64	89.	Distrustful	1.61	105.	Handsome	4.16
34.	Clever	2.69	70.	Dominant	3.11	106.	Hard-headed	2.04
35.	Cocky	2.02	71.	Dreamy	2.28	107.	Hard-hearted	1.85
36.	Cold	2.00	72.	Dull	1.92	108.	Hasty	2.04

NAGINA PARVEEN

Sl#	Adjectives	Mean Values	Sl#	Adjectives	Mean Values	Sl#	Adjectives	Mean Values
109.	Headstrong	1.92	154.	Modest	4.45	199.	Reflective	4.54
110.	Healthy	4.30	155.	Moody	2.30	200.	Relaxed	2.35
111.	Helpful	4.61	156.	Nagging	1.88	201.	Reliable	4.45
112.	High-strung	2.26	157.	Natural	3.40	202.	Resentful	2.95
113.	Honest	4.73	158.	Nervous	2.21	203.	Reserved	3.42
114.	Hostile	1.51	159.	Noisy	1.97	204.	Resourceful	3.50
115.	Humorous	4.08	160.	Obliging	4.19	205.	Responsible	4.54
116.	Hurried	2.11	161.	Obnoxious	1.38	206.	Restless	2.35
117.	Hostility	3.92	162.	Opinionated	1.59	207.	Retiring	3.73
118.	Imaginative	2.76	163.	Opportunistic	1.85	208.	Rigid	2.02
119.	Immature	2.04	164.	Optimistic	4.16	209.	Robust	2.83
120.	Impatient	1.78	165.	Organized	4.61	210.	Rude	1.38
121.	Impulsive	2.90	166.	Original	4.07	211.	Sarcastic	1.64
122.	Independent	3.35	167.	Outgoing	3.45	212.	Self-centered	2.04
123.	Indifferent	2.04	168.	Outspoken	4.47	213.	Self-confident	4.16
124.	Individualistic	3.19	169.	Painstaking	4.61	214.	Self-controlled	4.35
125.	Industrious	4.52	170.	Patient	4.40	215.	Self-denying	2.14
126.	Infantile	2.33	171.	Peaceable	4.54	216.	Self-pitying	2.21
127.	Informal	2.72	172.	Peculiar	3.64	217.	Self-punishing	2.56
128.	Ingenious	4.10	173.	Persevering	4.52	218.	Self-seeking	3.45
129.	Inhibited	2.71	174.	Persistent	4.57	219.	Selfish	1.09
130.	Initiative	4.23	175.	Pessimistic	2.71	220.	Sensitive	3.38
131.	Insightful	4.38	176.	Pleasant	4.04	221.	Sentimental	3.78
132.	Intelligent	4.61	177.	Pleasant	4.33	222.	Serious	4.07
133.	Introverted/reserved	2.23	178.	Pleasure-seeking	3.42	223.	Severe	1.47
134.	Introverted/wide	3.61	179.	Poised	4.07	224.	Sexy	2.28
135.	Introvert	2.02	180.	Polished	4.30	225.	Shallow	1.18
136.	Inventive	4.26	181.	Practical	4.61	226.	Sharp-witted	4.35
137.	Irresponsible	1.61	182.	Praising	3.57	227.	Shiftless	2.69
138.	Irritable	1.35	183.	Precise	3.71	228.	Show-off	1.73
139.	Jolly	4.52	184.	Prejudiced	1.56	229.	Shrewd	1.16
140.	Kind	4.64	185.	Preoccupied	2.50	230.	Shy	3.16
141.	Lazy	1.82	186.	Progressive	4.65	231.	Silent	2.40
142.	Leisurely	2.59	187.	Prudish	2.90	232.	Simple	4.16
143.	Logical	3.47	188.	Quarrelsome	1.50	233.	Sincere	4.64
144.	Loud	2.66	189.	Queer	1.80	234.	Slipshod	1.87
145.	Loyal	4.57	190.	Quick	2.76	235.	Slow	2.80
146.	Mannerly	4.49	191.	Quiet	3.11	236.	Sly	1.42
147.	Masculine	3.61	192.	Quitting	1.37	237.	Smug	1.38
148.	Mature	4.47	193.	Rational	3.59	238.	Snobbish	1.35
149.	Meek	3.47	194.	Rattlebrained	1.37	239.	Sociable	4.39
150.	Methodical	4.19	195.	Realistic	4.39	240.	Self-assured	4.38
151.	Mild	4.40	196.	Reasonable	4.28	241.	Sophisticated	1.73
152.	Mischievous	2.97	197.	Rebellious	2.23	242.	Spendthrift	1.97
153.	Moderate	4.16	198.	Reckless	2.00	243.	Spineless	2.00

244.	Spontaneous	3.14	263.	Timid	2.14	282.	Unsatisfied	3.10
245.	Spunky	2.67	264.	Thankless	1.42	283.	Unintelligent	1.47
246.	Stable	4.47	265.	Thorough	4.28	284.	Unkind	1.85
247.	Steady	4.40	266.	Thoughtful	4.38	285.	Unrealistic	1.83
248.	Stern	1.97	267.	Thrifty	4.40	286.	Unscrupulous	1.35
249.	Stingy	1.61	268.	Timid	1.80	287.	Unselfish	3.61
250.	Stolid	1.61	269.	Tolerant	4.07	288.	Unstable	1.83
251.	Strong	4.19	270.	Touchy	2.02	289.	Vindictive	1.61
252.	Stubborn	2.16	271.	Tough	1.85	290.	Versatile	4.42
253.	Submissive	3.92	272.	Trusting	4.45	291.	Warm	4.71
254.	Suggestible	3.10	273.	Unaffected	3.85	292.	Wary	4.19
255.	Sulky	1.97	274.	Unambitious	3.21	293.	Weak	2.16
256.	Superstitious	1.73	275.	Unassuming	4.02	294.	Whiny	2.02
257.	Suspicious	1.69	276.	Unconventional	3.28	295.	Wholesome	4.07
258.	Sympathetic	4.53	277.	Undependable	1.71	296.	Wise	4.54
259.	Tactful	3.42	278.	Understanding	4.45	297.	Withdrawn	2.16
260.	Tactless	2.14	279.	Unemotional	3.53	298.	Witty	3.71
261.	Talkative	3.30	280.	Unsociable	3.54	299.	Worrying	1.95
262.	Temperamental	1.59	281.	Unfriendly	2.23	300.	Zany	2.69

Table III
Fifteen Most Favourable and Fifteen Most Unfavorable Traits as Rated by 160 Subjects, on the ACL

Favourable Traits (Mean values 4.85 to 4.61)	Unfavorable Traits (Mean values 1.14 to 1.42)
Friendly	Deceitful
Civilized	Shrewd
Courageous	Cruel
Dependable	Greedy
Honest	Blustery
Dignified	Boastful
Gentle	Irritable
Alert	Snobbish
Clear-Thinking	Unscrupulous
Cooperative	Bitter
Good-Natured	Obnoxious
Kind	Shallow
Sincere	Smug
Capable	Arrogant
Determined	Sly

DISCUSSION

The first step in analysis of results was to determine the mean values of the favorability ratings for each of the 300 items. The 300 item scores of male and female were placed in a distribution and the means were computed. The obtained data were analyzed separately for the 60 male and 60 female subjects. According to Table I, the overall mean favorability scores for the male subjects across all 300 items are 3.07 (SD=1.18), while the comparable mean for female subjects are 3.04 (SD=1.17), and mean differences (i.e. t-test) are 0.11 which are non-significant. It was thus judged appropriate to pool the male and female's data, and to obtain a single mean favorability value for each item of Adjective Checklist. Table II shows a combined mean favorability values of 300 items as rated by 160 male and female students of Sindh University. Finally, we picked up the 15 most favorable traits with greater mean values and 15 most unfavorable traits with lesser mean values from 300 items of the Urdu version of the Adjective Check List (see table III).

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