

## Type A Behaviour Among Diabetics- A Gender Base Analysis

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### ABSTRACT

*The present study is aimed to compare the type A behaviour among diabetics of male and female. The sample for the study consisted of 100 subjects of male diabetics (group1) and 100 subjects of female diabetics (group2). ABBPS was administered on these subjects. Critical Ratio was applied to study the significance of difference between the type A behaviour of male and female diabetics. Result of the study reveal that, there is significance difference between the type A behaviour of male and female diabetics.*

The Type A behaviour pattern is an observable set of behaviours or style of living characterized by extremes of hostility, competitiveness, hurry, impatience, restlessness, aggressiveness, explosiveness of speech, and a high state of alertness accompanied by muscular tension whereas Type B persons are more relaxed, cooperative, steady in their pace of activity, and appear more satisfied with their daily lives and the people around them.(C. David Jenkins 1959).

Lazarus, (1974),Cohen et.al. (1979), Goldbandet. al. (1979)have found that personality type is associated with development of illness. The person identified as Type-A personality a pattern of behaviour, which includes easily aroused hostility, excessive competitiveness, and a pronounced sense of time urgency. Type-A personality typically displays hyperactive to stressful situations. By contract, the less driven Type-B personality does not display the hostility, competitiveness and time urgency of the Type-A personality. In various studies it has been found that type-II (non-insulin dependent) diabetics appear to sensitive to the effects of Type-A behaviour

Stabler et al. (1987) found 'Type-A' personality structure had an increased blood sugar elevation in response to stress. Children with a calmer disposition had a smaller glucose rise when stressed.

Studies of Rhodewalt & Macraft, (1988) indicate that Type-A diabetics experiencing high level of stress show poorer blood glucose control than Type-B diabetics under control (Halford et.al 1990). This may occur because Type-A individual react more strongly to threats to personal control, which elicits active and often stressful efforts to cope hereby elevating sympathetic nervous system activity and correspondingly, glucose level.

Railkkonenet.al (1994) found a high positive correlation between psychological coronary risk factors (Type-A) behaviour, exhaustion and depression and serum insulin, and cpeptide and blood glucose concentration .

According to Cohen et al(1997) type1 patients with history of a psychiatric illness might be at increased risk for developing diabetic retinopathy. Those patients with a psychiatric history were found to have a higher average glycosylated haemoglobin ( a measure of long term diabetic control).

Kariberg (1998) evaluated the effects of an intervention on hostility and time pressure and primary health care patients. Results revealed that the intervention group changed globel Type-A behaviour, hostility and time pressure significantly more than the control group.

Rhodewalt, F. (2001) tested the prediction that these features of Type A behaviour would interfere with blood glucose regulation in insulin-dependent diabetes mellitus patients. Type As were more likely than Type Bs to show poor blood glucose control. However, for patients in general, and Type As in particular, blood glucose regulation was not related to life stress. Rather, those Type As who displayed poor glucose control made more extreme self-attributions about the cause of their diabetes, were angrier about it, and felt they should fight it. The implications of these findings for a reactance-Type A model of medical compliance are discussed.

Several researches of Scott,(2007)had reported that the following are the typical characteristics of Type A Personality: urgency, impatience, aggressiveness which show up as impatience, rudeness, being easily upset over small things and excessively strong achievement-orientation. They also seem to show such physical characteristics as facial tension, tongue clicking, teeth grinding, dark circles under eyes, facial sweating.

### **Aim-**

Comparative analysis of type-A behaviour among diabetics of male and female.

### **Hypothesis-**

There is no significant difference between type-A behavior of male and female

### **Sample-**

The sample for the study consisted of 100 subjects of male diabetics (group1) and 100 subjects of female diabetics (group2).All the subjects were contacted directly after taking telephonic appointment. All the subject were clinically diagnosed by qualified physician and were under treatment from one year. MMHSI was administered on these 100 male and 100 female diabetics.

### **Tool-**

A /B Behaviour Pattern Scale (ABBPS) was developed byUpinderDhar, Manisha Jain (2001) to assess the extent of the basic component of type-A behaviour (such as tenseness, impatience, restlessness, achievement, domineering, workaholic )

### **Design:-**

An ex-post-facto research design was consider suitable for the present study.

### **Procedure-**

ABBPS was administered on100 subjects of male diabetics (group1) and 100 subjects of female diabetics (group2) according to the instruction given in test the manual. There was no time limit to complete scale but maximum 15-20 minutes were taken by each subject to complete it. The completed scale was collected from the subject and they were thanked for their cooperation.

The obtained data were analysed by applying critical ratio to find out the significance of difference between the type-A behavior of male and female diabetics.

### **Scoring-**

Scoring of ABBPS was done with the help of test manual. The responses were scored on the basis of the response rating table. Each statement was scored as- 5 for strongly agree, 4 for agree, 3 for uncertain,2 for disagree and 1 for strongly disagree. After scoring all the responses the table row score was calculated. Then the level of type A behaviour of all the subjects was found on the basis of the norms provided on the test manual.

## Result and Interpretation

Table-1

Mean, SD and CR Values between male and female Diabetics on type-A personality pattern

Type A Personality Factor	Type-A Personality Pattern				CR
	Male		Female		
Total	Mean	61.57	Mean	57.11	3.37**
	SD	8.75	SD	9.91	
TENSNESS	Mean	14.28	Mean	13.69	1.29
	SD	3.08	SD	3.40	
IMPATIENCE	Mean	7.81	Mean	7.31	1.90
	SD	2.04	SD	1.67	
RESTLESSNESS	Mean	10.26	Mean	9.47	2.26*
	SD	2.45	SD	2.50	
ACHIEVEMENT ORIENTATION	Mean	11.32	Mean	10.05	4.44**
	SD	1.90	SD	2.14	
DOMINEERING	Mean	11.53	Mean	10.42	3.47**
	SD	2.07	SD	2.45	
WORKAHOLIK	Mean	6.37	Mean	6.17	0.73
	SD	1.94	SD	1.93	

d.f 198 --> .05-->1.97

d.f 198 --> .01-->2.60

To see the significant difference of type A personality pattern between male and female diabetics, the critical-ratio was calculated. The CR value required to be significant at 0.01 level is 2.60 and 0.05 level is 1.97 at the degree of freedom 198.

Table 1 shows that the **total mean** of type A personality pattern of male diabetics was 61.57 , SD 8.75 and female diabetics was 57.11 ,SD 9.91 (C.R. = 3.37  $p < 0.01$ ). It may be observed from table 1 that there is significant difference in type A personality pattern of male and female diabetics.

On **tenseness** factor male diabetics have higher mean 14.28 than female diabetics 13.69 (CR= 1.29  $p > 0.05$ ). It means male have higher sense of time urgency than female diabetics. It may be observed from table 1 that there is no significant difference of type-A personality pattern (form-A) as impatience between male and female diabetics.

On **impatience** factor male diabetics have mean 7.81 and female diabetics have mean 7.31 (CR= 1.90  $p > 0.05$ ). It may be observed from table 1 that there is no significant difference type-A personality pattern (form-A) as impatience between male and female diabetics.

On **restlessness** factor male diabetics have higher mean 10.26 then female diabetics mean 9.47(CR= 2.26  $p<0.05$ ).It means male have more not feeling relaxed while working than female. It may be observed from table 1 that there is significant difference type-A personality pattern (form-A) as restlessness between male and female diabetics.

On **achievement orientation** factor male diabetics have higher mean 11.32 then female diabetics mean 10.05 (CR=4.44 $p<0.01$ ). It means male have more need to achieve something worthwhile whenever there is a possibility than female. It may be observed from table 1 that there is significant difference type-A personality pattern (form-A) as achievement between male and female diabetics.

On **domineering** factor male diabetics have higher mean 11.53 then female diabetics mean 10.42(CR =3.47 $p< 0.01$ ). It means male have more sense of power over anything than female. It may be observed from table1that there is significant difference type-A personality pattern (form-A) as domineering between male and female diabetics.

On **workaholic** factor male diabetics have mean 6.37 and female diabetics have workaholic mean 6.17(CR= 0.73  $p> 0.05$ ). It may be observed from table 1 that there is no significant difference type-A personality pattern (form-A) as workaholic between male and female diabetics.

Thus the hypothesis stating that, “There is no significant difference between type-A behaviour of male and female diabetics” is not proved by the present finding.

Review of literature revealed a few studies on type-A behaviour of diabetics.

Stabler B, Surwit RS, Lane JD, Morris MA, Litton J, Feinglos MN(1987) studied the relationship between presence of Type A behaviour pattern and glycemic response to stress in children with insulin dependent diabetes mellitus (IDDM). Twelve male (six Type A and six Type B) and nine female (four Type A and five Type B) insulin-dependent diabetic patients between the ages of 8 and 16 years received a standard meal and blood glucose values were assessed two hours later. All subjects then played a competitive videogame for 10 minutes following which blood glucose was assessed again. Preprandial and postprandial blood glucose values did not differ between the groups. However, only Type A subjects showed a hyperglycemic response to the videogame stress. Type A subjects also demonstrated significantly higher glycohemoglobin values. In order to assure that this effect was due to a differential response to stress and not simply a difference in metabolic response to a meal, a second study was conducted in which blood glucose values were assessed at one, two and three hours following a standard meal. No significant differences in postprandial blood glucose values were observed between Type A and Type B subjects.

E. Billing, P. Hjemdahlf and N. Rehnqvist(1997) found patients with stable angina pectoris experienced significantly more stressful events, and suffered more frequently from disturbed and psychosomatic symptoms than healthy controls. At work they experienced less skill discretion and less control. The patients had higher rating scores for hostility and lower levels of self-rated overall well-being. With regard to gender differences, women were more likely to suffer from the strain of work, psychosomatic symptoms, disturbed sleep and stressful events than male patients. Females rated less type A-behaviour and hostility than males.

## **Conclusion-**

Thus the, result reveals that the male diabetics are more affected than female diabetics by type-A behaviour.

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