CHAPTER V
DISCUSSION

The purpose of the present study was to study the psycho-social profiles of the subjects at risk of developing or with manifest Ischaemic disease. The variables studied were stress, self-esteem, locus of control-internal, external and others, neuroticism and extraversion. These are also considered as variables to be part of the psychological risk factors, the psychological components.

Matarazzo (1984) discusses behaviours as 'behavioural pathogens,' and 'behavioural immunogens.' Within his conceptualization Type A behaviour would be considered as a behavioural pathogen. The diseases that are now considered major causes of death are those, where behaviour may be considered a risk factor. Obtained data were treated with the help of analysis of variance, t-test and coefficient of correlation. The treatment with the help of analysis of variance revealed that the locus of control (others) scores and neuroticism scores differed significantly for the whole group. The obtained F-ratio 2.8355 is significant at the 0.05 level for the locus of control (others) variable, the obtained F-ratio 2.6328 is significant at 0.01 level for the neuroticism variable. However, the other variables stress, self esteem, locus of control (internal, external and others) extraversion scores of the combined group of myocardial infarction and Risk Factors do not show any significant difference. The obtained F ratio for these variables was insignificant.
Besides the overall comparisons, individual comparisons were also made with the help of t-test. These comparisons were intergroup and within group. In Table 4.8-4.14 the groups compared were Business 45+ (Myocardial Infarction) and Business 45- (Myocardial Infarction). The two groups did not show any significance of difference in their means. Thus their level of stress, self esteem, locus of control, internal, external and others, neuroticism and extraversion are more or less the same. This implies that both the groups are similar. Once the business men of over 45 years and of under 45 years of age had a Myocardial infarction, their behaviour variables are similar.

In Table 4.15-4.21 the groups compared were Business 45+ Myocardial Infarction and Executive cases 45+ Myocardial Infarction. The means for the stress and Locus of Control (external) level were higher for the Executive cases 45+ Myocardial Infarction group. Data have revealed that some underlying characteristics may not only lead certain type to choose demanding careers, but simultaneously put them at risk for atherosclerosis, or Ischaemic Heart disease. House (1975) noted that people with 'extrinsic' motivations for work, such as the desire for status or money, are likely to select stressful jobs for the prestige they carry. In contrast those who are interested in the work itself are less swayed by external factor. Furthermore, it is clear that many elements contribute to the subjective appraisal of a particular work environment. Objective conditions, such as heavy work load or greater responsibility maybe harrasing, but can also be perceived as challenging. Similarly, overwork is
not simply a function of load, but may result from a disorganised work strategy or failure to delegate. In each case the personal dimension must be added to the measurement of external demands. This is reflected in the emphasis placed by many investigators on perceived work load and job responsibility (House et al 1979). Therefore, when we analyse the two groups, we find that the executives who were over 45 years of age and had suffered a myocardial infarction had a higher level of stress and locus of control (external) than Businessmen over 45 years of age, who had suffered a myocardial infarction.

The factor which can be attributed to a higher stress level can be because these individuals in the category of executives are professionals, who are either working for an organisation or for themselves. Therefore, it can also be their perception which raises the stress and locus of control (external) level. The means of the other variables in these two groups are alike.

In tables 4.22-4.28 where the Business 45+ cases Myocardial Infarction and executive cases 45- Myocardial Infarction are compared on all the variables stress, self esteem, locus of control (internal, external and others), neuroticism & extraversion. The means are more or less the same.

In tables 4.29-4.35 where the Business cases 45+ Myocardial Infarction and Business cases 45+ Risk Factors are compared on the variables,
stress, self esteem, locus of control (internal, external and others), neuroticism & extraversion the means are more or less the same.

In Tables 4.36-4.42 where the Business cases 45+ Myocardial Infarction and Business cases 45- Risk Factors are compared on the variables, stress, self esteem, locus of control (internal, external and others), neuroticism & extraversion the means are more or less the same.

In Tables 4.43-4.49 where the Business cases 45+ Myocardial Infarction and Executive 45+ cases Risk factors are compared on the variables, stress, self esteem, locus of control (internal, external and others), neuroticism & extraversion the means are more or less the less.

In Tables 4.50-4.56 where the Business cases 45+ MI and Executive 45- cases Risk Factors are compared on the variables stress, self esteem, locus of control (internal, external and others), neuroticism & extraversion the means are more or less the same. We are seeing a pattern here in which the Business cases 45+ Myocardial Infarction group is not different from the Business cases 45- Myocardial Infarction, Business cases 45+ Risk Factors, Business cases 45- Risk Factors, Executive cases 45+ Risk factors and Executive cases 45- Risk factors. It appears so far that the groups are similar as the means are more or less the same.

In Tables 4.57-4.63, where the Business cases 45- Myocardial Infarction and Executive case 45+ Myocardial Infarction groups are
compared the means for the neuroticism variable is higher for the Executive case 45+ myocardial infarction group. Otherwise, the means for the other variables are more or less the same. Since the Executive cases 45+ Myocardial Infarction group was a mixed group as stated earlier the cause responsible for executive cases 45+ Myocardial Infarction having a higher level of neuroticism can be because this group had a higher educational and awareness level than the business group. Survivors of Myocardial Infarction showed a number of changes on MMPI scales related to neuroticism, when compared with pre-illness scores. They also reported increases in awareness and concerns for bodily symptoms. (Lebovits et al 1967, Bruhn et al 1969).

In Tables 4.64-4.70 where the Business cases 45- Myocardial Infarction and executive cases 45- Myocardial Infarction are compared. The mean of stress variable is higher for executive cases 45- Myocardial Infarction, where the means are more or less the same for the other variables. Here, again we see that the stress level is higher for executives cases 45+ and 45-, who have had a Myocardial Infarction.

In Tables 4.71-4.77 where Business cases 45- Myocardial Infarction and Business cases 45+ Risk factors are compared the locus of control (external) mean is higher for Business cases 45- Myocardial Infarction. The reason for this could be because after an Myocardial Infarction, the individual may feel that his control has shifted outside of himself.
The extraversion score mean is higher for Business cases Risk Factors 45+. According to Eysenck and Fulker (1982) extraversion was found to have high correlation with both ambition activity. The means of the other variables were more or less the same.

In Tables 4.78-4.84, Business cases 45- Myocardial Infarction and Business cases 45- Risk Factors are compared, the means for the stress and extraversion level are higher for the group Business cases 45- Risk Factor. The reason for the stress level being higher would be their perception of the stress experienced by them. The reason for the extraversion level would be the same as for the Business Risk Factors 45+. The means for the other variables are more or less the same.

In Tables 4.85-4.91 where Business cases 45+ Myocardial Infarction and Executive cases 45+ Risk Factors are compared, the mean for the Locus of Control (external) is higher for Business cases 45- Myocardial Infarction. The mean for the Locus of control (internal) is higher for the Executive cases 45+ Risk Factor. The means for the other variables are more or less the same. However, no comparison can be made in these two groups as no relationship exists.

In Tables 4.92-4.98 where Business cases 45- Myocardial Infarction and Executive cases 45- Risk Factors are compared, the means for all the variables are more or less the same. So it appears that the two groups are similar.
In Tables 4.99-4.105 where executive cases 45+ Myocardial Infarction and Executive cases 45- Myocardial Infarction are compared, the means of the stress and locus of control (others) levels are higher for Executive cases 45+ Myocardial Infarction. This implies the Executive cases 45+ Myocardial Infarction have a higher stress level because of his age and additional responsibilities. Similarly, as the stress level is higher for the Executive cases 45+ Myocardial Infarction, their locus of control (others) is also higher as the locus of control (internal) decreases. They become more vulnerable and therefore, more dependent. The means of the other variable are more or less the same.

In Tables 4.106-4.112 where executive cases 45+ Risk Factors are compared, the means for the Locus of control (external) locus of control (others) are higher for the Executive cases 45+ Myocardial Infarction. Analysing the causes, the executive cases 45+ Myocardial Infarction, after their heart attack tend to relinquish their control. The Business cases 45+ Risk Factor have a higher mean for neuroticism and this is because neuroticism according to Eysenck (1982) correlates highly with tenseness. The means for the other variables are more or less the same.

In Tables 4.113-4.119 where Executive cases 45+ Myocardial Infarction and Business cases 45- Risk factor were compared, the mean for the stress level was higher for Executive cases 45+ Myocardial Infarction. The means for neuroticism and extraversion were higher for Business cases
45- Risk Factor. However, no analysis can be made as there is no relationship between the two groups.

In Tables 4.120-4.126, where Executive cases 45+ Myocardial Infarction and Executive cases 45+ Risk Factor were compared, the means for the Locus of Control (internal) Locus of Control (external) and Locus of Control (others) were higher for Executive cases 45+ Risk Factor. This implies that the group Executive cases 45+ Risk Factor has a locus of Control which is developed, ie internal and also very dependent on external and chance. The means for the other variables are more or less the same.

In Tables 4.127-4.133 where executive cases 45+ Myocardial Infarction and Executive cases 45- Risk factors were compared, the mean for the neuroticism level was higher for Executive cases 45- Risk Factor. Here, again we accept what Eysenck (1982) states that neuroticism correlates highly with tenseness. The means for the other variables were more or less the same.

In Tables 4.134-4.140 where Executive cases 45- Myocardial Infarction and Business cases 45+ Risk Factor were compared, the mean for Locus Control (external) was higher for Executive cases 45- Myocardial Infarction. The means for neuroticism and extraversion levels were higher for Business cases 45+ Risk Factor. However, there is no relationship here.
In Tables 4.141-4.147 where Executive cases 45- Myocardial Infarction and Business cases 45- Risk Factor were compared, the means for the neuroticism and extraversion level were higher for Business cases 45- Risk Factors. Eysenck (1982) has stated that ambition and activity correlated highly with extraversion and tenseness with neuroticism. The means for the other variables were more or less the same.

In Tables 4.148-4.154 where executive cases 45- Myocardial Infarction and Executive cases 45+ Risk Factors were compared, the locus of control (external) level is higher for executive cases 45- Myocardial Infarction. Here again the reason is the same that after an myocardial infarction, the individual tends to shift his locus of control. The means for the other variables were more or less the same.

In Tables 4.155-4.161 where executive cases 45- Myocardial Infarction and Executive cases 45- Risk Factor were compared, the means for the Locus of Control (external) was higher for Business cases 45- Risk Factor. The reason for Business cases 45- Risk Factors having a higher mean for locus of control (external) could be because in comparison it is smaller group. The means for the other variables were more or less the same.

In Tables 4.162-4.168 where Business cases 45+ Risk Factors and Business cases 45- Risk Factors were compared the means for stress, self
esteem, locus of control (internal, external and others), neuroticism and extraversion were compared the means were more or less the same.

In Tables 4.169-4.175 where Business cases 45+ Risk Factors and executive cases 45+ Risk Factors the mean for the neuroticism level is higher Business cases 45+ Risk Factors. This could be that this group is more tense than the other group. The mean for the Locus of Control (internal) level is higher for executive cases 45+ Risk Factors, which means that this group is more dependent on themselves than Business cases 45+ Risk Factors. The means for the other variables are more or less the same.

In Tables 4.176-4.182 where Business cases 45+ Risk Factors and Executive cases 45 Risk Factors were compared, the means for all the variables were more or less the same.

In Tables 4.183-4.189 where Business cases 45- Risk Factors and Executive cases 45+ Risk Factors were compared, the means for self-esteem, locus of control (external) and neuroticism were higher for Business cases 45- Risk Factor. The mean for Locus of Control (internal) level was higher for Executive cases 45+ Risk Factor. However, there is no relationship here.
In Tables 4.190-4.196 where Business cases 45- Risk Factors and Executive cases 45- Risk Factors were compared, the means were not significantly different for variables.

In Tables 4.197-4.203 where Executive cases 45+ Risk Factor and Executive cases 45- Risk Factor were compared the mean for Locus of Control (Internal) level is higher for Executive cases 45+ Risk Factor. This implies that Executive cases 45+ Risk Factors group felt that they were more in control. The Executive cases 45- Risk Factors groups means for self esteem and Locus of Control (others) is higher. The other means are more or less the same. The self esteem variable mean is unusual.

Tables 4.204-4.211 compares the two groups, Myocardial Infarction and Risk Factors. The means of neuroticism and extraversion are higher for the Risk Factor groups.

Table 4.212 shows the inter-corelation among different variables in the Risk Factor group. In the Risk Factor group, there are negative correlations between the age, and levels of self esteem, Locus of Control (external) between the stress and Locus of Control (others) and between stress and Locus of Control (internal).

Table 4.213 shows the inter-correlations among different variables in the Myocardial Infarction group. There was a negative correlation between stress and Locus of Control (internal) and between self esteem and Locus
of Control (external). There was a positive correlation between self-esteem and Locus of Control (internal) and extraversion and between Locus of Control (external) and Locus of Control (others).

Table 4.214 shows the inter-correlation among different variables in the combined group. There were negative correlations between the age and self esteem and Locus of Control (external) between stress and Locus of Control (internal). There was positive correlations between Locus of Control (external) and Locus of Control (others) and between Locus of Control (others) and extraversion.

The inter group comparisons with the help of t-test reveal some very interesting results. The profile which has emerged is that the Business groups, whether it is Risk Factor or Myocardial Infarction cases, showed no differences. Moreover, when we compared the Business cases 45- Myocardial Infarction and Executive cases 45- Risk Factor, Business cases 45+ Risk Factors and Executive cases 45- RF, Business cases 45+ MI and Executive cases 45- Myocardial Infarction, Business cases 45+ Myocardial Infarction and Business cases 45- Myocardial Infarction, the means for all the variables did not differ significantly.

While looking at the comparisons between Business Myocardial Infarction 45+ and Business Myocardial Infarction 45- and Executive cases Myocardial Infarction 45- we see some interesting facts emerging. The Executive cases 45+ and 45- Myocardial Infarction have a higher stress
level than the Business 45+ and Business 45- Myocardial Infarction group. The Executive cases Myocardial infarction 45+ and 45- also has a higher mean for Locus of Control (external and others). The Executive cases 45+ Myocardial Infarction group also has a higher mean for Locus of Control (external and others). The Executive cases 45+ Myocardial Infarction has a higher level of neuroticism than the Business Myocardial Infarction 45- group.

When we compare the Risk Factor groups to examine the Business 45+, Business 45-, Executive cases 45+ and Executive cases 45-, the means of neuroticism and extraversion are higher for the Business 45- and Executive cases 45- when compared with Executive Myocardial Infarction 45-. On overall comparison between the different groups, apart from neuroticism and extraversion which have also emerged for Business 45+, the Locus of Control (internal), Locus of Control (external) and Locus of Control (others), and stress are significant.

Our data have revealed that executive cases 45+ Myocardial Infarction and Executive cases 45- Myocardial Infarction have a higher stress level than the Business 45+ Myocardial Infarction and Business 45- Myocardial Infarction. Several studies point to the fact that subjective job stress and job dissatisfaction are related to occupational characteristics and the size of the company. What are the stressful dimensions of the work experience? This question is still controversial. Frankenhauser et al (1976) suggested that certain combinations of quantitative or qualitative...
"underload", and "overload" may serve as a common denominator of stress experience. Theorell (1976) concentrates on "high work demands" and "job decision latitude," while others refer to variables such as time urgency, degree of social control, responsibility, inconsistency of work demands, level of concentration, and a number of distractions and interruptions. In our study we can concentrate on high work demands and job decision latitude as our group comprised of the upper echelons of society. The salary of the subjects was seven thousand rupees and above. Since the sample was taken from the Escorts Heart Institute, Delhi which is a private hospital, it can only be afforded by the well-to-do class. Our sample group definitely showed high work demands and job decision latitude. From the interviews taken with the group the data collected was that there was great job pressure. In some cases there was qualitative "underload" and "overload". Another factor can be taken into consideration and that is the educational qualification level of the executive group was higher than the Business group.

Another individual difference variable which might affect perceptions of the environment is Locus of Control. In our comparison of different groups, Locus of Control (external) dominates, followed by Locus of Control (others) and Locus of Control (internal). Payne and Hartley (1987) found a positive correlation between perceptions of the severity of problems facing 399 unemployed men and an abbreviated measure of Rotter's Locus of Control. Payne's study (1988) has measured both neuroticism and Locus of Control variables and their perception of environmental stressfulness.
Therefore, it can be concluded that Locus of Control may influence perception of the environment just as much as it might influence the reporting of the psychological symptoms. Therefore, we find that the Executive cases 45+ Myocardial Infarction and Executive cases 45- Myocardial Infarction have a higher level of Locus of Control (external). The Business 45- Myocardial Infarction, also have a high level of Locus of Control (external). The Locus of Control (others) is high for Executive cases 45+ Myocardial Infarction.

In the Risk Factor cases, the Locus of Control (Internal) is high for Executive cases 45+ Risk Factors then the Locus of Control (others) comes for Executive Risk Factor, then the Locus of Control (external) for Business 45- Risk Factors, and Executive cases 45+ Risk Factors. The Kraus and Stryker (1984) study which contained over 2000 men (between 45-54) revealed that men with external Locus of Control orientations experience higher levels of psycho-physical distress because of stressful events, than men with internal Locus of Control. Kraus (1986) again studied a group of a different age to see if the results were replicated. Kraus found that in his sample of 351 older adults that extreme internals and extreme externals had more depressive symptoms. He also showed that internals actually reported fewer negative life events and suggested this was because they initiated actions to avoid or ameliorate them. Now when we examine the Executive cases 45+ Myocardial Infarction group, we find that their stress level, their Locus of Control (external), their Locus
of Control (others) levels are high and they may be having a similar response to the men in the Kraus & Stryker (1984) study.

The Executive cases 45+ Risk Factor group has a high Locus of Control (internal) level which means that they can initiate actions or ameliorate a situation. Lefcourt (1983) says that in the short term stress has an immediate impact on nearly every one, irrespective of their Locus of Control or neuroticism but that given the passage of time, the internals succeed in leaving their disappointments behind while the externals use them to confirm their belief that the world is outside their control, so their effects live for longer. In our study we find that a particular group ie (the Executive cases 45+, 45- myocardial group) is effected most. Their disease has strengthened their belief in Locus of Control (external) and Locus of Control (others).

The variables, neuroticism, extraversion, Locus of Control (external), Locus of Control (others) seem to be interlinked. The Risk Factors 45+ and 45- have high means for extraversion, neuroticism, Locus of Control (external), Locus of Control (others). Eysenck and Fulker (1982) by means of a factor analytic study of their own questionnaire of Type A and Type B behaviour have found three major factors emerging tenseness, ambition and activity. In their study, these three factors appeared equally for males and females and extraversion was found to correlate highly with both ambition and activity and neuroticism correlated even more highly with tenseness. High Extraversion and Neuroticism scorers have been linked
with 'complainer' syndrome and it is not likely that these people subsequently have a heart attack. Floderus (1974) suggested and provided some evidence for the suggestion that angina pectoris, hypertension, and tachycardia may be related to high neuroticism and introversion while Myocardial Infarction and hyperlipidemia may be related to high neuroticism and extraversion and Myocardial Infarction as demonstrated by Bendine and Groen (1963). Many other studies (e.g. Baeret et al 1979; Frankenhauser, Lundsbert and Forsman 1980; Innes, 1980) clearly indicate the relevance of neuroticism and extraversion to assessment of coronary prone behaviour. However, in the studies of clinical populations suffering or not suffering from coronary heart disease, the expected relationship between neuroticism and disease has been found in the sense that those least subject to the disease were found to have the highest neuroticism scores.

In the area of coronary artery disease, it was shown that people high in neuroticism were more apt to be diagnosed as having angina pectoris than their better adjusted peers, although the two groups had an equal incidence of objectively verifiable coronary artery disease. (Costa and McCrae 1982).

The influence of neuroticism operates at all adult ages, regardless of actual state of health. Findings dictate, that even though older persons are subject to increased complaints and disorders - specifically in the cardiovascular, genitourinary and sensory organ systems - they do not make
disproportionately more physical complaints than younger people. Increased health or somatic complaints are a function of individual differences in neuroticism and not of age and aging. This position is supported by both cross-sectional and longitudinal data. (Costa and McCrae 1982).

In an earlier study Cherry (1978) also noted from a longitudinal study that those who scored high on symptoms at age 32 had also scored high on neuroticism at 16 years. Therefore, looking at this data and our own data, we can come to the conclusion that the Risk Factor group has a higher mean for extraversion and neuroticism. This result is further strengthened by inter-group comparison between the Myocardial Infarction subjects and Risk Factor subjects.

The influence of one individual variable might therefore counteract the effect of the other. Waldron et al (1977) have shown that those with higher educational qualifications score higher on measures of Type A but educational status is negatively correlated with symptoms of psychological ill-health (Fletcher and Payne 1980). The confounding role of trait - neuroticism appears again in attempts to relate locus of control to symptoms of psychological strain. Spector (1982) reviews studies using Locus of Control as a variable in organisational settings. In discussing the validity of the construct Spector notes that Locus of Control is negatively related to trait anxiety (Joe 1971, Archer 1979) i.e. externals are more anxious.
More recently Hoehn-Saric and McLeod (1985) showed that even within a sample of 112 adults diagnosed as having chronic anxiety disorders, those higher on externality scored higher on neuroticism and trait anxiety. The fact that Locus of Control and anxiety correlate within such a homogenous population is impressive evidence for overlap between operational measures of the two constraints. However, the inevitable exceptions that prove the case but raise doubts rather than disproof must also be noted. Ray and Katahn (1968) did not find a relationship between Locus of Control and job tension.

It is well established that externals report higher levels of depression and since anxiety correlates strongly with depression, there is almost certainly some overlap between measures of affect and locus of control (Payne 1988). The correlations between these two variables could be due to one causing the other but it could also be due to a third variable - stress or poor self esteem.

Neuroticism is the most obvious variable which might influence perceptions of stressfulness since it defines the person as being in a state of unease about the uncertainty of events. Looking at the Risk Factors cases, the uncertainty of events would cause them unease. Moreover, the fact that they may be having one or more risk factors which lead to ischaemic heart disease, would influence their perceptions of stressfulness.
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Payne's (1988) study has been mentioned, attempted to predict mental health (general health questionnaire) amongst the unemployed from a model of environmental stress, where the level of overall stress was determined by the balance of problems, opportunities and supports in the environment of the unemployed, all the measures were self-reports but the study was longitudinal, the measures being collected on three occasions over a two year period. At the third phase of study only trait neuroticism was measured using the Eysenck personality inventory (Eysenck & Eysenck 1964). Trait neuroticism was highly correlated with perceptions of problems including perceptions of financial problems. Janman et al (1988) in a study of 381 psychiatrist nurses found that those higher on neuroticism tended to see the communications as less supportive and the administration as less supporting. Examining the Risk Factor cases on the basis of the Payne study, the groups are different. However, once again trait neuroticism correlates with the perceptions of problems and also financial problems. Our groups of Risk Factors cases is a mixed group which is executives, professionals and self employed individuals.

Ormel, Johan, Stewart Roy, Sandmann (1988) present a structural equation model of the way in which personality factors may modify the response to changes in life situation based on two wave panel data from a random sample of 296 Dutch adults (22-65 years). Three definitions of vulnerability were studied, high neuroticism, low self esteem and Locus of Control (external). The analysis led to the following conclusions: that first
previous symptoms level was strongly related to current symptom level. The strength of this relationship was independent of self-esteem and Locus of Control (external), but modified by neuroticism. Secondly the impact of life situation changes on distress level was moderately strong and similar to what others have reported. Thirdly, a marked modifier effect was found for neuroticism, responsiveness significantly increased with neuroticism level. For self-esteem and Locus of Control (external) the authors observed reduced responsiveness among low vulnerability subjects but the difference did not reach statistical significance. Here again if we look at this analysis the Risk Factor group can be considered vulnerable and therefore their level of neuroticism is high.

In an ongoing study Brozek et al (1966) at Minnesota on Myocardial Infarction and angina pectoris cases, an equivocal association or different findings in different subgroups was found for neuroticism. Two retrospective studies in Texas by Thiel et al (1963) and Rime et al (1973) at Belgium on Myocardial Infarction, neuroticism, anxiety and depression showed positive findings. There are many supporting findings from large case-control studies, but for these findings, it can be argued that the frightening experience of a Myocardial Infarction, precipitated or aggravated the levels of anxiety, depression and other troubled feelings, that were observed in the retrospective studies of coronary heart disease patients.
Successful efforts, commonly experienced during early adulthood as well as in privileged living conditions are thought to be harmless to the cardiovascular system. It is only when effort are followed by poor pay-off or by loss of control, that they develop their critical impact. In accordance with other investigators (Karasek et al 1982; Frankenhauser 1983; Henry 1983) this has been labelled active distress. Active distress synergistically stimulates the sympathoadrenomedullary and the pituitary-adrenocortical system and by doing so promotes neurohormonal imbalance, which has been shown to impair the cardiovascular system. Individuals with high need for control are at high risk using strategies like rigid cognitive strategies of formerly successful coping under these control limiting circumstances.

We find when referring to these studies that these have been conducted on the blue collar workers. Our sample is of executive, business and professional groups. We are noticing that Executive cases 45+ Risk Factor have a high Locus of Control (internal) when compared with the other groups. Moreover, if we observe the Executive cases 45+ Myocardial Infarction have a higher stress and Locus of Control (external) level. Can we surmise that a high Locus of Control (internal) in Executive cases 45+ Risk Factor may lead to a Myocardial Infarction? According to Kraus and Strykes (1984) for extreme internals and extreme externals, the effects of stress on psychophysiological distress did not differ, though the two variables are related for both groups.
Numerous studies cite that an external Locus of Control is more closely associated with anxiety or neuroticism than with extraversion. It does appear that there may be some complex link between the impulsivity component of extraversion and Locus of Control, because the extravert reacts impulsively to the changing environment. The trait extraversion has appeared for the Risk Factors cases. Keeping Eysenck's factor analysis in mind we can accept this as extraversion denotes ambition and activity, (Hiland Study, 1989)

Our study comprised only of high socio-economic group consisting of business professionals and executives. The foreign studies are based on blue collar and white collar workers. Thus, findings in the two conditions ie. European and American (blue and white collar workers) and Indians (present study) are different from one another in a number of ways.

The profile which emerges is that the Risk Factors cases are identified by the variables extraversion and neuroticism. The correlations which emerged for Risk Factor cases are negative. The correlations for the Myocardial Infarction group are positive between Locus of Control (external) and Locus of Control (others). The combined results revealed positive correlations between Locus of Control (internal) and extraversion, between Locus of Control (external) and Locus of Control (others) and between Locus of Control (others) and extraversion.
Our research is the study of the social, psychological correlates of prospective patients of Ischaemic heart disease and patients already having this disease. Is the psychosocial profile of the two groups similar and if it is, then is it possible to help in identification of subjects at risk of Ischaemic Heart Disease? There is a remarkable similarity between the two groups of subjects namely Myocardial Infarction cases and Risk Factor cases. The Risk Factor cases had higher means for extraversion and neuroticism which implies that they are very ambitious, active and also tense. Since they have a high score for neuroticism, the likelihood of them coming for a medical examination are very high. Moreover, the sample on the whole was very educated and affluent. The Locus of Control (internal, external and others) also seem to be major variables in the study.

Fisher (1985) has reported a tendency for association between high externality scores and underprivilege and poverty. However, in this group it is not underprivilege which has led to high externality, it is the dependence on powerful people. The external domains of control in many cases may be socio-political. The sample group selected was from an exclusive hospital and therefore, the subjects were well-placed in life and educated. In the group of Myocardial Infarction cases, according to the interview which the researcher had with the patient, the patient had been through a crisis. The crisis was either related to his job, business or family. In the Risk Factor cases, the neuroticism and the extraversion variables are highlighted. There is a difference in the profile of the Executive cases 45+ Myocardial Infarction and Executive cases 45- Myocardial Infarction group.
These subjects have a higher level of stress, Locus of Control (external) and Locus of Control (others). However, the groups on the whole are not that different. Locus of Control variable - internal, external and others is emerging as a dominant factor. There is a positive correlation between Locus of Control and extraversion, and between the variables of Locus of Control. We can say that in order to identify a likely patient for Ischaemic heart disease, we should look for the variables neuroticism, extraversion and Locus of Control.