The aim and the objective of the present study was to estimate various types of validity for the construct of temperament as given by Buss (1975). Construct validation was done by correlational method and factor analysis. The sex-differences were verified by calculating 't'-value. Buss gave his theory of EASI temperament with the Plomin.

AGGRESSION

Aggression is a basic component of emotionality as given by Buss (1961). According to Buss – Males are more aggressive than females. In laboratory experimental aggression behaviour men showed more aggression than women as shown by 't'-test. It was also indicated by Buss (1966a). In the laboratory, men aggress more than women, and male victims receive more aggression than female victims. Frustration is believed to lead to aggression. In the laboratory, frustrated subjects aggress more intensely than control subjects, and perhaps more interesting, verbally attacked subjects aggressed the most intensely of all (Geen, 1968). The trait of aggressiveness, as assessed by Questionnaire correlates with aggression intensity in the laboratory (Scheier, Buss, Buss, 1978). The various findings suggest that the laboratory procedures offer knowledge that generalizes to everyday situations.

Researchers have operationalized aggression behaviour in a number of ways, including measuring the intensity of electric shocks administered to another individual (e.g. Bailey and Taylor, 1991; Bushman, 1995; Buss, 1963, 1966; Giancola and Zeichner, 1995a, 1995b; Taylor, 1967), pushing the hitlings (e.g. Josephson, 1988), monetary or point penalties (e.g. Bjork, Dougherty, Moeller, and Swann, 2000; Cheek and Dyck, 1986; Netler et al. 1998; Strube, Turner, Cerro, Stevens and Hinchey, 1984), verbal attack (e.g. Langerspetz and Engblom, 1979) and negative evaluations (e.g. Leibowitz, 1968; Rothaus and Worchel, 1960; Shemberg, Levinthal and Allman, 1968;
Wingrove and Bond, 1998). Aggressive behaviour is distinguished from high level of trait aggressiveness; the latter identifies people who are prone to hostile cognitions and angry affect as well as a readiness to engage in physical and verbal aggression (Buss and Perry, 1992). Thus, the results for physical aggression were clearly higher than those for the other three components of aggression. This fact is not surprising for physical aggression since it is more striking and therefore more salient and observable than the other three kinds. Most classification in the literature shows two kinds of aggression, namely hostile aggression, and instrumental aggression. Anger and different kinds of aggression were positively correlated with hostility but not with instrumental one (Remirez and Andreu, 2005).

Physiological aggression as illustrated by anger, the emotion closely linked to aggressive acts. Anger involves physiological arousal. Heart rate and breathing accelerate, blood pressure rises, blood is directed away from the gut to the large skeletal muscles, and sugar is mobilized in the blood. These are preparations for the massive muscular effort that occur in physical aggression (Cannon, 1929). For anger is often a precursor to aggression. As an emergency reaction, physiological arousal cannot last long. It sets in motion homeostatic mechanisms that eventually restore the body to its resting starts.

The factor – 2 in males and factor- 3 in females indicate that four items of anger, aggression of EPP and aggression (Buss & Perry) significantly correlated, thereby showing basic nature of this trait in both sexes. Thus, the findings attest to Buss’s tenet that aggression/anger is a basic emotion.

Tiedens (2001) theorized that the tendency for those high in trait aggressiveness to make hostile attributions may increase anger and create a vicious cycle of hostility and negative affect.
EMOTIONALITY

In the theory, emotionality has been taken as a negative emotionality. Those who have high score on it describes themselves as stressed, harassed and prove to experiencing strong negative emotions such as anxiety and anger (Tellegen et al., 1988). Negative emotionality has been found to correlate consistently with many of the symptoms of anxiety and depression (Watson, Clark and Carey, 1988).

In the present study, the intercorrelation of (negative) emotionality and their components anger, fear and distress indicate that the correlation between emotionality (distress) and fear ranged from 0.52 for women and 0.61 for men. It was also indicated by Plomin (1974).

Thus, both fear and anger are related to distress, though as might be expected, the size of the correlation suggested that they are differentiated (Buss and Plomin, 1984). It is indicated by the inter-correlations among three components of emotionality (Table 4.4). Fear and anger were negatively related. It was also seen by intercorrelation of emotionality with experimental measure.

The ‘t’-value (fear) shows that females are more fearful than males. But the sex difference appears only during the course of development (Buss and Plomin, 1975; Maccoby and Jacklin, 1974), by adulthood, women score higher on fear questionnaire, report a greater variety of specific fear and more frequently seek help for phobias than men.

In laboratory, after inducing fear, bodily arousal in fear involves activation of the sympathetic division of the autonomic nervous system, most frequently cardiovascular arousal is assessed, especially heart rate and blood pressure. But in present study, physiological measures did not correlate significantly with any of the emotionality components. It was shown in
intercorrelations of psychometric measures of Buss and Plomin (fear) with physiological measures. Although, the subject’s blood pressure (systolic/diastolic) and Galvanic skin response after threatening of strong electric shock (which is a laboratory measure of fear) rose than normal state in men and women as indicated by table of 't' value. The pulse rate (PR) after threatening of strong electric shock was found to be less in males than normal state, whereas females show high pulse rate than normal state as indicated by 't' value.

**ACTIVITY**

The inter-correlation of activity’s items show that in males, the correlation of tempo and vigor is 0.43 and in females is 0.27. According to Wellems, Malina and Buss, 1990). Highly active people need to expend energy whether through tempo or vigor. Thus, when these reports of specific physical activities were added to objective measures of body and build strength, the multiple correlation between them and the vigor scale of the EASI was 0.52 for women and 0.43 for men.

The ‘t’-value indicated that males were significantly more active than females. Easton and Enns (1986) after reviewing ninety studies concluded that “males are more active than females by roughly one half of a standard deviation, a difference that accounts for a little less than 5% of the variation in the activity level distribution”. Clearly, there is a sex difference though not a large one. Perhaps males are innately more active than females. Rough and tumble play requires more energy than most other kinds of children’s play and boys engage in more of such play than girls (Maccoby and Jacklin, 1974). Even in adulthood they carry on their habits. There is a possibility in socialization, boys and girls are treated differently, their play being channeled into grooves deemed appropriate for each sex.
After doing activity the more arousal is indicated. The factor – sympathetic arousal and specific autonomic – sweat gland loaded purely on physiological factors. These factors display loadings on blood pressure and skin conductance. When more energy is being mobilized, the defense reaction (Cardiovascular component only) consists of increased heart rate, elevated systolic and diastolic blood pressure and an increase in cardiac output (pulse rate) (Levinthal, 1986).

Sebej-Mullner and Farkas (1984) also discuss an additional point regarding blood pressure. They showed that although both measures of blood pressure register an increase during arousal, diastolic blood pressure is more sensitive to experimental manipulation and evidences a greater increase. Such findings were confirmed in factors 10 and 13 in females and factor 13 in males.

**SOCIABILITY**

The ‘t’ value of sociability indicates that females were less sociable than males on experimental measure. But there was no any significant difference between males and females on items of Buss and sociability of EPP.

The sex difference must be viewed from a developmental perspective (Buss and Plomin, 1975). Preschool girls and boys do not differ in sociability but starting in late childhood, girls are slightly but significantly more sociable, and the difference stabilizes in adulthood. Though men and women differ little in the motive to with others, they diverge in how it is expressed in behaviour. Women tend to be exchange the social rewards of praise-soothing and affection; thus their contacts are more interpersonal. Men tend to assemble more in group in which there may be two opposite tendencies: Solidarity and peership, on the other hand, and competition for jobs, prestige, competence. These tendencies are governed by norms governing their appropriateness (Holter, 1970). In fact the measures did not include items which express the
incentive and manners of social interactions. It needs to be more differentiated like EA and I in terms of finer components.

COMBINATIONS OF TEMPERAMENTS

Combinations of temperament (in terms of aggression) are taken because when Buss gave the theory of temperament of EASI with Plomin then they drop the aggression as a component of emotionality. So, there was a need to combine all the components of Buss’s theory. Three of the temperaments may be regarded as predispositions to aggressiveness. People high in activity are likely to be more intensely aggressive as mainly in terms of tapping frequency (after doing activity) as indicated by factor-15 (female) and factor-14 (males). Most of their responses are delivered with more force, and when the behaviour is aggressive, more force means more intense aggression.

Emotionality affects aggressiveness in two different ways, depending on which of its differentiated components is ascendant. If anger predominates - the person will display considerable angry aggression. If fear predominate, it will exhibit all aggression except hostility, which was indicated by Factor 3,5 (females), and factor-2 (male).

The control component of impulsivity appears to be most potent determinants of aggressiveness when people low in control become angry, they are likely to express this emotion in angry aggression. In addition, there may be an incentive they badly want, which can be attained by instrumental aggression. Thus, highly impulsive person tend to display both angry and instrumental aggression which were shown by factor – 5 (female) and factor – 6, 5 (male).

When these three temperaments are combined, they strongly tilt people toward or away from aggression. Those who are vigorous, easily angered, and impulsive are likely to attack others, either to ventilate anger or to achieve an
incentive, it will be shown by Factor - 9 (males). Those who are not vigorous, rarely angered, and in control of their impulses tend not to aggress, it was shown by factor -5 (female).

Sociable people are taken as extraved who want the stimulation of interacting with others – that is, they are highly sociable. And being sociable, they respond warmly to others and tend to be reflective in nature as shown by factor – 6 in females. Sociables are spontaneous, enjoy the excitement of doing things on the spur of the moment, which means that they are low in the reflection component of impulsivity, which is shown by Factor-6 (males). They are expressive, laughing or crying easily, outgoing, etc., which means they are less disciplined as shown by factor – 5 (males). Hence, the combination of sociability and impulsivity differed in both sexes.

Reflective persons tend to speak faster (tempo) and have broader gestures (vigor), which means that they are high in activity, as shown by factor-7 (female) this relation indicates that reflective people are high in activity that means they are more aggressive which is shown by Factor – 9 (males). Thus, pure factors eluded in the factor analysis.

GENDER DIFFERENCES IN COMBINATION OF TEMPERAMENT

The question of gender differences in temperaments is arguably one of the most fundamental questions in gender differences, research in the areas of personality and social behaviour. Temperament reflects biologically based emotional and behavioural consistencies that appear early in life and predict - often in conjunction with other factors – patterns and outcomes in numerous other domains such as psychopathology and personality.

Although meta-analysis typically estimates mean differences between two groups, the current study also estimated gender differences in variability. The “greater male variability” hypothesis has been suggested for gender
differences in some behaviour (e.g. Feingold, 1992). Yet, some studies indicate that although girls experience greater negative affect than boys, they also experience greater positive affect and an overall greater emotional intensity (Grossman and Wood, 1993).

This may reflect greater variability in girls' emotional experiences. Thus, the greater female variability hypothesis also seems appropriate for some dimensions of temperament.

In Buss and Plomin's theory some contradictions, gaps and fallacies were found. To fill-up these gaps, all the components of the EASI and aggression are compared with the same items of Eysenck Personality Profiler (Eysenck and Wilson, 2000).

Males are physically much more aggressive than females and barely more verbally aggressive and hostile. The difference in physical aggression appears to be a combination of hormones and socialization. Boys are encouraged to stand up and fight, and there is enough machismo in young men for them to demonstrate their manhood through fighting. But in present study, both males and females show similar aggression as indicated by factor-2 (male) and factor-3 (female). It may be attributed to more basic element of emotional behaviour description in items of E.

When the criteria suggested by Cohen (1988) in evaluating these effect sizes was used, the sex difference for physical aggression were large, that for verbal aggression was moderate and that for hostility was small. There was, of course, no significant effect for anger. Thus, what was done in Buss and Perry's measure of aggression happened to be correct.

There is no sex difference in fear or activity until the school years, and starting then, females are more fearful than males. There appears to be no biological explanation for the greater fearfulness of females, which means that
socialization practices probably account for it. Boys and girls are treated differently, their play being channeled into grooves deemed appropriate for each sex, such socialization starts early.

In one study, mothers supervised the play of six-month-old infants who were not their own (Smith and Lioyd, 1978). The children were dressed as boys or girls regardless of their real sex, so that the mother’s reactions were based on perceived sex. Perceived boys were verbally encouraged to be more physically active than were perceived girls. Dolls were offered only to perceived girls. Thus, the mothers supplied six-month-old infants with sex-appropriate toys and encouraged more activity in boys, and they did so even when they know the true sex of the infants. If the sexes are treated differently so early in life, we should not be surprised that boys subsequently are more active.

This study reveals that there is a similar pattern for activity. There is no sex difference in the preschool years, but after that, males are slightly more active. We know that primate males are more active than females, so by extrapolation to our species a biological explanation is tenable. But male’s games and sports tend to be more active, and vocations requising strength generally belong to men. So the socialization explanation may also be invoked.

There is no significant differences for impulsivity. However, most of those with attention deficit disorder are males, which raises the question of whether this specific disorder has a sex linked genetic basis.

Similar factor in both males and females are: In factor-1, males and females show same BP and named as “sympathetic Arousal-Cardiac”. In factor-3 of males and factor-4 females both are showing same PR. In factor-2 except EPP of males and factor-3 of females and both are showing same “aggression”.
CONCLUSIONS

1. EASI measure appears to operationalize the construct of temperament with moderate validity. Although its convergent validity turned out to be satisfactory, yet its divergent validity was poor.

2. The factorial validity did not mimic the proposed structure. Even the components of the same trait did not emerge as separate factors. Factors at times exhibited obliqueness or poor independence. Other times too narrow factors were exhibited (Windle, 1989a). Method specific variance emerged as strong underlying axis resulting into multiplicity of factors, e.g., physiological based factors where behavioural content became irrelevant.

3. A strong case for unidimensional general quadrant for further verification was suggested in the findings, which could be arousability-activity (Strelau, 1987a). Their content features may be sub component. Further, the findings revealed some sort of typology at upper level, at least. Proposing the structure of temperament is yet premature. Although, Ane (2004) has found satisfactory psychometric properties of EAS and explained covariance between subscales on the basis of latent stability factors and time-specific factors.