SUMMARY

The main aim of the present investigation was to study the role of protective and risk factors in drinking and smoking among adolescents of both the genders. Among the protective factors, Spiritual Well Being, Health Habits, Perceived Parental Care, Self Efficacy, Coping Style were chosen. Stress, Depression, Perceived Parental Over Protection, Aggression-Hostility and Sensation Seeking were chosen as the risk factors. In addition, gender differences in protective and risk factors were also studied.

Spiritual Well Being and its two dimensions; Religious Well Being and Existential Well Being were measured using Spiritual Well Being scale developed by Paloutzian and Ellison (1982). Different Health Habits viz., Eating Habits, Exercise and Fitness and Avoidance of use of Alcohol and Drugs were measured using the Health Habits Inventory of Atwater (1995). Self Efficacy was measured using scale given by Mattoo and Malhotra (1998). Perceived parental bonding was measured by Parental Bonding instrument developed by Parker et al. (1979). It has two dimensions viz., Perceived Parental Care and Perceived Parental Overprotection. The latter was used to measure different Coping Styles-Task Focussed Coping, Emotion Focussed Coping and Avoidant Coping.

For measuring Stress, the tests used were: Daily Hassles and Uplifts assessed by using daily Hassles and Uplifts scale developed by Delongis et al. (1982). Stress Symptoms rating scale devised by Heilbrun and Pepe (1985) was used to measure stress symptoms.

Beck Depression Inventory devised by Beck and Steer (1987) was used to measure depression.
To measure Sensation Seeking and its dimensions *viz.*, Thrill and Adventure Seeking, Experience Seeking, Disinhibition and Boredom Susceptibility-modified Sensation Seeking Scale developed for use in Indian population by Basu *et al.* (1993) was used.

The Buss-Perry Aggression Questionnaire (Buss and Perry, 1992) used to measure four dimensions of Aggression *viz.*, Physical Aggression, Verbal Aggression, Anger and Hostility.

In addition, an interview schedule based on WHO (2002) guidelines was administered to assess demographic information and assess smoking and drinking status of the respondents.

The total sample comprised of 350 adolescents. The sample comprised of adolescents not smoking or drinking, smoking only, drinking only and both drinking and smoking of both the genders. They were in the age range of 17-19 years.

The subjects were administered all the tests and the interview schedule. A 4 × 2 Analysis of Variance with unequal replications was employed among other statistical techniques to analyze the raw data. Means and SDs were calculated for different groups. t-ratios were calculated to find out the significance of differences between means of various groups on all the measured variables. Analyses of Variance where drug use status (4 levels) and gender (2 levels) were the Independent Variables was employed. Stepwise Discriminant functional analyses and Logistic Regression analyses were also employed.

**Descriptive Statistics**

The raw scores were analyzed using appropriate statistical techniques. Means and standard deviations for all the groups were calculated (Tables 1-8). The same have been graphically depicted in Figures 1-7.
As mentioned above raw data was analyzed employing t ratios and Analysis of Variance.

**t-ratios**

Means, SDs and t-ratios comparing drug users and non-users revealed significant t-ratios for RWB, SpWB, HH, Exercise and Fitness, Perceived Parental Care, Emotion Focussed Coping, Depression and Experience Seeking, DIS, BS and Total SS (Table 1).

On comparing male and female drug users, significant t-ratios for Spiritual Well Being, Religious Well Being, Existential Well Being, Health Habit, Eating Habits, Avoidance of use of alcohol and drugs, and Self Efficacy were seen (Table 2). Parental Over Protection, Stress Symptoms, Depression, Disinhibition, Physical Aggression, Verbal Aggression and Total Aggression. The means, SDs and t-ratios comparing drinking males and females have been given in Table 3. Table revealed significant t-ratio on Stress Symptoms, Hassles, and Depression. Means, SDs of male and female smokers were evaluated (Table 4). On comparing male and female smoker t-ratios were seen to be significant for Spiritual Well Being, Religious Well Being, Existential Well Being, Self Efficacy, Stress Symptoms, Depression, Total Sensation Seeking, Disinhibition, Total Aggression.

Means, SDs of male and female non drug users were also evidenced (Table 5). t-ratios emerged significant on Eating Habits and Task Focussed Coping (Table 5).

Comparison of t-ratios of drinking and smoking males and females was significant for Spiritual Well Being, Religious Well Being, Existential Well Being, all the Health Habit, Perceived Parental Care, Avoidant Coping, Hassles, Uplifts, Boredom Susceptibility, Physical Aggression, Verbal Aggression and Total Aggression (Table 6).
The t-ratios of comparison of drinking versus smoking groups were significant for Existential Well Being, Exercise and Fitness, Self Efficacy, Perceived Parental Care, Perceived Parental Over Protection, Stress Symptoms, Hassles Uplifts, Depression, Disinhibition, Total Sensation Seeking, Anger and Total Aggression (Table 7).

Means, SDs and t-ratios of all the boys and girls were also compared (Table 8). t-ratio was significant for Spiritual Well Being, Religious Well Being, Existential Well Being, Total Health Habit, Self Efficacy, Perceived Parental Over Protection, Stress Symptoms, Depression, Disinhibition, Physical Aggression, Verbal Aggression.

**Analysis of Variance**

A $4 \times 2$ Analysis of Variance was conducted with 4 levels of drug use status and 2 level of gender. F ratios for drug use status emerged significant for Spiritual Well Being, Religious Well Being, Exercise and Fitness, Avoidance of use of Alcohol and Drugs, Total Health Habit, Self Efficacy, Perceived Parental Care, Emotional Focussed Coping, Stress Symptoms, Hassles, Depression, Experience Seeking, Disinhibition, Boredom Susceptibility, Total Sensation Seeking and Anger.

F ratios for gender differences were emerged significant for Religious Well Being, Existential Well Being, Spiritual Well Being, Exercise and Fitness, Avoidance use of Alcohol and Drugs, Total Health Habit, Self Efficacy, Perceived Parental Over Protection, Stress Symptoms, Depression, Disinhibition, Physical Aggression, Verbal Aggression and Total Aggression.

**Intercorrelational analyses and Stepwise Logistic Regression Equations and Stepwise Discriminant Functional Analyses** were also computed. Logistic Regression Equation revealed Religious Well Being, Emotion Focussed Coping,
Uplifts and Experience Seeking dimension of Sensation Seeking to discriminate between drug users and non users (Table 44).

Stepwise Discrimination Functional Analysis was run to compare boy and girl drug users (Table 42). Results revealed Stress Symptoms, Existential Well Being, Disinhibition, Perceived Parental Care, Physical Aggression and Eating Habits to emerge as discriminants.

Stepwise Discrimination Functional Analysis was also run to discriminate drinking versus smoking groups (Table 43). It was apparent that Hassles, Anger, Task Focussed Coping, Disinhibition, Exercise and Fitness and Depression emerged as significant discriminants.

The exact meaning of any serious investigation lies in the small answers through the data analysis and discussion and the greater importance emerges in the new questions discovered in the process. The drinking and smoking among adolescents is embedded in gender, support systems and fitness. It is pertinent to note that the management of risk factors and reinforcement of protective factors may go a long way in preparing healthy, fully functional and productive adolescents! May our families and educational institutions create a positive environment for the younger generation to achieve self-efficacy and fulfilment!