SUMMARY

The primary aim of the present investigation was to study the effects of the different types of internet addiction viz. cyber-sexual addiction, cyber-relational addiction and information overload, and gender on internet addiction and its correlates among adolescents. The effect of the employment status of the mothers on internet addiction and its correlates was also studied. For this purpose, 3x2x2 analysis of variance was employed with 30 replications in each condition.

The secondary aim was to study the relationship of internet addiction with Eysenckian dimensions of Personality viz., Psychoticism, Neuroticism, Extraversion and Social Desirability (Lie Scale), State – Trait Anxiety, Locus of Control, Sensation Seeking (Thrill and Adventure Seeking, Experience Seeking, Disinhibition, Boredom Susceptibility and Total Sensation Seeking), Shyness, Loneliness, Stress Symptoms, Daily Hassles and Uplifts, Coping (Task Focused Coping, Emotion Focused Coping and Avoidance Focused Coping), Mental Health and its dimensions (Being Comfortable With Self, Being Comfortable With Others, Perceived Ability to Meet Life’s Demands and Total Mental Health), Perceived Parental Bonding (Perceived Maternal Care, Perceived Maternal Overprotection, Perceived Paternal Care, Perceived Paternal Overprotection), Satisfaction With Life and Perceived Social Support.

Predictors of internet addiction in terms of above mentioned variables were also identified for all the groups.

For diagnosing the Internet Addiction, Young’s Diagnostic Criteria (1996) was used. The test comprised of eight questions to be answered in terms of ‘Yes’ or ‘No’ response. According to Young (1996), any person
giving a ‘Yes’ response to five or more of the questions, is diagnosed as a Dependent user of Internet.

For measuring internet addiction, Internet Addiction Test devised by Young (1998 a) was used. It comprised of 20 items associated with internet use, including psychological dependence, compulsive use and withdrawal symptoms, as well as related problems of school, sleep, family and time management. According to Young’s criteria, persons scoring in the range of 20 – 39 points are average on-line users. Such persons might surf the Web a bit too long at times, but they have control over their usage. Persons scoring in the range of 40 – 69 points experience frequent problems because of the Internet. Persons scoring in the range of 70 – 100 points experience significant problems in their lives, caused by their internet use. Consequently, subjects scoring more than 20 points were identified as dependent users of internet and subjects scoring less than 20 points were identified as non–dependent internet users.

For classifying the Dependent Internet users into different categories of Cyber-sexual, Cyber-relational and Information Overload groups, subjects were personally interviewed regarding the various purposes they used the internet for; and in accordance with the excessive usage in particular areas such as social networking, information seeking and viewing pornography, they were classified into three categories viz., Cyber-Sexual, Cyber-Relational and Information Overload. They were also asked about the various sites frequently visited by them.

Eysenck’s Personality Questionnaire - Revised (EPQ-R) devised by Eysenck et al. (1985) was used to measure the four dimensions of personality viz. Psychoticism, Neuroticism, Extraversion and Social Desirability (Lie Scale). Rotter’s Locus of Control Scale (1966) was used to measure the externality – internality dimension of locus of control.
For measuring sensation seeking, sensation seeking scale by Basu et al. (1993) was used. It measures four dimensions viz. Thrill and Adventure Seeking, Experience Seeking, Disinhibition and Boredom Susceptibility. State – Trait Anxiety Inventory (STAI) given Speilberger et al. (1970) was employed to measure the dimensions of state anxiety and trait anxiety.

Shyness was measured using the Shyness Questionnaire devised by Henderson and Zimbardo (2000).

To measure stress, Stress Symptoms Rating Scale developed by Heilbrun and Pepe (1985) was used. In addition to this, the Daily Hassles and Uplifts Scale by Delongis et al. (1982) was used to measure the hassles and uplifts in the life of adolescents.

The Coping Styles Inventory by Carver et al. (1989) was used to measure three types of coping viz. Task Focused Coping, Emotion Focused Coping and Avoidance Focused Coping. Mental health of the individuals was measured using WHO Measure of Mental Health adopted for use in India by Wig (1999) which has three dimensions viz. Being Comfortable With Self, Being Comfortable With Others and Perceived Ability To Meet Life Demands. All the three dimensions totaled to give total mental health score.

Loneliness was measured using revised UCLA Loneliness Scale devised by Russel et al. (1980). Life satisfaction was measured using the Satisfaction With Life Scale developed by Diener et al. (1985).

Perceived parental bonding among the adolescents was measured using the Parental Bonding Instrument by Parker et al. (1979). It has four dimensions viz. perceived paternal care, perceived paternal overprotection, perceived maternal care and perceived maternal overprotection.
Perceived social support was measured with the help of the Perceived Social Support Questionnaire devised by Nehra et al. (1996).

All the subjects were explained about the nature and aim of the investigation and were requested to volunteer as respondents. Their informed consent was obtained before they were enlisted as subjects.

The raw scores consisted of scores on all the above mentioned 31 variables viz. Internet Addiction, Psychoticism, Neuroticism, Extraversion, Social Desirability (Lie Scale), Being Comfortable With Self, Being Comfortable With Others, Perceived Ability to Meet Life’s Demands, Total Mental Health, Stress Symptoms, Task Focused Coping, Emotion Focused Coping, Avoidance Focused Coping, Satisfaction With Life, State Anxiety, Trait Anxiety, Daily Hassles, Daily Uplifts, Maternal Care, Maternal Overprotection, Paternal Care, Paternal Overprotection, Loneliness, Thrill and Adventure Seeking, Experience Seeking, Disinhibition, Boredom Susceptibility, Total Sensation Seeking, Perceived Social Support, Locus of Control and Shyness.

The raw scores were analyzed using appropriate statistical analysis viz. Descriptive statistics, t-tests, Anova, Discriminant Functional Analysis, Inter-Correlations and Regression analysis.

**t-RATIOS**

A comparison of the mean scores and t-ratios of male adolescents and female adolescents revealed that significant differences emerged on the following variables: Internet Addiction, Psychoticism, Stress Symptoms, Trait Anxiety, Thrill and Adventure Seeking, Disinhibition, Boredom Susceptibility, Total Sensation Seeking, Locus of Control and Shyness.

A comparison of the mean scores and t-ratios of children of working mothers and children of non-working mothers revealed that significant
differences emerged on the following variables: Internet Addiction, Being Comfortable with Others, Perceived Ability to Meet Life's Demands, Total Mental Health, Avoidance Focused Coping, Satisfaction With Life, Daily Uplifts, Loneliness, Perceived Social Support, Locus of Control and Shyness.

A comparison of the mean scores and t-ratios of the Cyber-Sexual and Cyber-Relational groups revealed that significant differences emerged on the following variables: Internet Addiction, Psychoticism, Extraversion, Social Desirability (Lie Scale), Perceived Ability to Meet Life’s Demands, Total Mental Health, Stress Symptoms, Emotion Focused Coping, Daily Hassles, Daily Uplifts, Perceived Maternal Care, Perceived Paternal Care and Loneliness.

A comparison of the mean scores and t-ratios of the Cyber-Sexual and the Information Overload groups revealed that significant differences emerged on the following variables: Internet Addiction, Psychoticism, Neuroticism, Extraversion, Social Desirability (Lie Scale), Stress Symptoms, Emotion Focused Coping, State Anxiety, Daily Hassles, Thrill and Adventure Seeking, Boredom Susceptibility and Locus of Control.

A comparison of the mean scores and t-ratios of the Cyber-Relational and Information Overload groups revealed that significant differences emerged on the following variables: Internet Addiction, Being Comfortable with Others and Locus of Control.

ANOVA

Analysis of Variance was conducted with addiction type, gender and working status of mothers as independent variables. The effect of these three independent variables was singly and jointly analyzed for all the variables. Following variables showed significant F-ratios.
a) Analysis of Variance for the Addiction Types

Analysis of Variance for the Addiction Types revealed significant differences between the three types of Internet users on Internet Addiction, Psychoticism, Neuroticism, Extraversion, Social Desirability (Lie Scale), Stress Symptoms, Emotion Focused Coping, State Anxiety, Daily Hassles, Loneliness, Thrill and Adventure Seeking, Boredom Susceptibility and Locus of Control.

b) Analysis of Variance for Gender

Analysis of Variance for Gender revealed significant differences between the male adolescents and female adolescents on Internet Addiction, Psychoticism, Stress Symptoms, Daily Hassles, Thrill and Adventure Seeking, Disinhibition, Boredom Susceptibility, Total Sensation Seeking, Locus of Control and Shyness.

c) Analysis of Variance for the Working Status of Mothers

Analysis of Variance for the Working Status of Mothers revealed significant differences among the Children of Working and Non-working Mothers on Internet Addiction, Being Comfortable with Others, Perceived Ability to Meet Life’s Demands, Total Mental Health, Avoidance Focused Coping, Satisfaction With Life, Daily Uplifts, Loneliness, Perceived Social Support, Locus of Control and Shyness.

A further perusal of the ANOVA Tables 3.1 to 3.31, revealed many significant interaction effects also. The interaction effect of Addiction Type and Gender revealed the following F-ratios to be significant: Psychoticism, Neuroticism, Being Comfortable With Others, Perceived Ability to Meet Life’s Demands, Total Mental Health, Task Focused Coping, Emotion Focused Coping, Daily Hassles, Daily Uplifts, Loneliness, Thrill and Adventure Seeking, Experience Seeking,
Disinhibition, Boredom Susceptibility, Total Sensation Seeking, Locus of Control and Shyness. The interaction effect of Addiction Type and Working Status of Mothers revealed the following F-ratios to be significant: Internet Addiction, Task Focused Coping, Thrill and Adventure Seeking, Total Sensation Seeking, Locus of Control and Shyness. The interaction effect of Gender and Working Status of Mothers revealed the following F-ratios to be significant: Locus of Control and Shyness. The interaction effect of Addiction Type, Gender and Working Status of Mothers revealed that following F-ratios to be significant: Neuroticism, Being Comfortable with Self, Being Comfortable with Others, Perceived Ability to Meet Life’s Demands, Total Mental Health, Stress Symptoms, Task Focused Coping, Emotion Focused Coping, Satisfaction with Life, State Anxiety, Experience Seeking, Boredom Susceptibility, Total Sensation Seeking, Locus of Control and Shyness.

STEPWISE DISCRIMINANT FUNCTIONAL ANALYSIS

The number of predictor variables in the present study being very large, it was thought advisable to conduct Stepwise Discriminant Functional Analysis instead of standard or direct Discriminant Functional Analysis.

The number of predictor variables used for the Cyber-Sexual and Cyber-Relational groups was 29. Results revealed a set of 6 variables emerged significant when the Cyber-Sexual and Cyber-Relational groups were compared. The predictors that emerged significant in order of importance were Stress Symptoms, Extraversion, Daily Hassles, Daily Uplifts, Emotion Focused Coping and Psychoticism.
The number of predictor variables used for the Cyber-Sexual and Information Overload groups was 29. Results revealed a set of 8 variables emerged significant when the Cyber-Sexual and Information Overload groups were compared. The predictors that emerged significant in order of importance were Daily Hassles, Internet Addiction, Extraversion, Emotion Focused Coping, Social Desirability (Lie Scale), Psychoticism, Boredom Susceptibility and Daily Uplifts.

The number of predictor variables used for the Cyber-Relational and the Information Overload groups was 29. Results revealed a set of 2 variables emerged significant when the Cyber-Relational and Information Overload groups were compared. The predictors that emerged significant in order of importance were Internet Addiction and Locus of Control.

CORRELATIONAL ANALYSIS

Correlational analysis was done to study the relationship of Internet Addiction with Eysenckian Dimensions of Personality, Anxiety, Locus of Control, Sensation Seeking, Shyness, Loneliness, Stress Symptoms, Daily Hassles and Uplifts, Coping, Mental Health, Parental Bonding, Satisfaction with Life and Perceived Social Support,

In the total sample, Internet Addiction was significantly and positively related with Psychoticism, Neuroticism, State Anxiety, Shyness, Loneliness, Stress Symptoms, Daily Hassles, Avoidance Focused Coping, Maternal Overprotection and Paternal Overprotection. It was significantly and negatively correlated with Trait Anxiety, Daily Uplifts, Task Focused Coping, Being Comfortable with Self, Being Comfortable with Others, Total Mental Health, Satisfaction with Life, Maternal Care and Paternal Care.
Among the male adolescents, Internet Addiction was significantly and positively related with Psychoticism, Neuroticism, State Anxiety, Shyness, Loneliness, Stress Symptoms, Daily Hassles, Avoidant Focused Coping and Perceived Maternal Overprotection. It was significantly and negatively related with Daily Uplifts, Task Focused Coping, Being Comfortable with Self, Total Mental Health, Perceived Maternal Care, Perceived Paternal Care, Satisfaction with Life and Perceived Social Support.

Among the female adolescents, Internet Addiction was significantly and positively related with Neuroticism, State Anxiety, Shyness, Stress Symptoms, Avoidant Focused Coping and Perceived Maternal Overprotection. It was significantly and negatively related with Trait Anxiety, Being Comfortable with Others, Total Mental Health, Perceived Maternal Care, Perceived Paternal Care and Satisfaction with Life.

Among the children of working mothers, Internet Addiction was significantly and positively related with Psychoticism, State Anxiety, Shyness, Stress Symptoms, Daily Hassles and Avoidant Focused Coping. Internet Addiction was significantly and negatively related with Perceived Maternal Care, Perceived Paternal Care and Satisfaction with Life.

Among the children of non-working mothers, Internet Addiction was significantly and positively related with Psychoticism, Neuroticism, State Anxiety, Locus of Control, Shyness, Loneliness, Stress Symptoms, Daily Hassles, Avoidant Focused Coping, Perceived Maternal Overprotection and Perceived Paternal Overprotection. It was significantly and negatively related with Daily Uplifts, Task Focused
Coping, Being Comfortable with Self, Total Mental Health, Perceived Maternal Care, Perceived Paternal Care and Satisfaction with Life.

In the Cyber-sexual group, Internet Addiction was significantly and positively related with Psychoticism, Neuroticism, State Anxiety, Shyness, Loneliness, Stress Symptoms, Daily Hassles, Avoidant Focused Coping and Perceived Maternal Overprotection. It was significantly and negatively related with Social Desirability (Lie Scale), Trait Anxiety, Daily Uplifts, Being Comfortable with Self, Perceived Ability to Meet Life’s Demands, Total Mental Health, Perceived Maternal Care, Perceived Paternal Care and Satisfaction with Life.

In the Cyber-relational group, Internet Addiction was significantly and positively related with Neuroticism, State Anxiety, Locus of Control, Disinhibition, Shyness, Avoidant Focused Coping, Perceived Maternal Overprotection and Perceived Paternal Overprotection. It was significantly and negatively related with Trait Anxiety, Being Comfortable with Others, Task Focused Coping, Perceived Maternal Care, Satisfaction with Life and Perceived Social Support.

In the Information Overload group, Internet Addiction was significantly and positively related with Shyness and Stress Symptoms. It was negatively and significantly related with Task Focused Coping.

REGRESSION ANALYSIS

With Internet Addiction as the criterion variable, regression equations were run for the Total Sample, Male adolescents, Female adolescents, Children of Working Mothers, Children of Non-working Mothers, Cyber-sexual group users, Cyber-relational group users and Information Overload group users.
In the total sample, the predictors that emerged significant were Avoidant Focused Coping, Stress Symptoms, Satisfaction with Life, Experience Seeking, Shyness, Daily Hassles and Boredom Susceptibility.

Among the male adolescents, the predictors that emerged significant were Satisfaction with Life, Avoidant Focused Coping, Stress Symptoms, Daily Hassles and Being Comfortable with Others.

Among the female adolescents, the predictors that emerged significant were Stress Symptoms, Avoidant Focused Coping, Boredom Susceptibility and Shyness.

Among the Children of Working Mothers, the predictors that emerged significant were Stress Symptoms, Avoidant Focused Coping, Boredom Susceptibility and Shyness and Locus of Control.

Among the Children of Non-working Mothers, the predictors that emerged significant were Avoidant Focused Coping, Satisfaction with Life, Neuroticism, Daily Hassles, Shyness and Experience Seeking.

In the Cyber-Sexual group, the predictors that emerged significant were Satisfaction with Life, Daily Uplifts, Daily Hassles, Perceived Paternal Care, Avoidant Focused Coping, Shyness and Disinhibition.

In the Cyber-Relational group, the predictors that emerged significant were Avoidant Focused Coping, State Anxiety, Perceived Maternal Overprotection and Experience Seeking.

In the Information Overload group, the predictors that emerged significant were Stress Symptoms and Task Focused Coping.