SUMMARY

The primary aim of the study was to compare adolescents of both the genders, with and without gambling tendencies on psycho-social variables. The gambling groups were further categorized into three sub groups viz., SocialGamblers, At-Risk Gamblers and Problem Gamblers. All the groups were compared on Gambling tendencies; Mental Health and its dimensions; Stress Symptoms; Perceived Stress; Styles of Coping; Dimensions of Perceived Parental Bonding; Perceived Social Support; Dimensions of Sensation Seeking; Rotter’s Locus of Control; Eysenckian Dimensions of Personality; Dimensions of Impulsivity put forth by Barratt; Satisfaction with Life; Satisfaction with time spent with Father; Bonding with Father; Satisfaction with time spent with Mother; Bonding with Mother; Perceived Health Status and Perceived Happiness Status.

The secondary aim of the research was to study the relationship between gambling tendencies and psycho-social factors among adolescents for both the gender. Multiple tests were used to measure gambling tendencies among adolescents viz. Problem Gambling Severity Index (PGSI), South Oaks Gambling Screen-Revised Adolescent (SOGS-RA), Young’s Diagnostic Questionnaire (YDQ) modified for Gambling Addiction, Kimberly Young’s Gambling Test (Internet Addiction Test Modified for Gambling Tendencies).

The sample of the study comprised of 240 adolescents in the age range of 16-18 years. On the basis of the scores obtained on the screening tool viz. Diagnostic Statistical Manual (DSM) IV Multiple Response adapted for Juveniles (DSM IV MR-J) Criteria for Pathological Gambling, four groups of adolescents were formed viz. adolescents without gambling tendencies, adolescents with social gambling tendencies, adolescents with at-risk gambling tendencies and adolescents with problem gambling tendencies. Half of the adolescents chosen were males and other half were females. 180 adolescents (90 males and 90 females) comprised the sample with gambling tendencies and 60 adolescents (30 males and 30 females) comprised the sample of without gambling tendencies. These were chosen randomly from different schools of NCR region. Care was taken that the sample comprising of adolescents with and without gambling tendencies were homogeneous with respect to socio-economic status, age and educational background.
To measure dimensions of Personality, many tests were used. Eysenck’s Personality Questionnaire–Revised–Short Form by Francis et al. (1992) was used to measure Extraversion/Introversion, Psychoticism, Neuroticism and Social Desirability. The Externality / Internality were measured using Rotters’ Internal-External Locus of Control Scale (LOC) (Rotter, 1966).

Impulsivity was measured using the Barratt’s Impulsivity Scale (BIS 11) (Patton et al., 1995). Barratt’s Impulsivity Scale-11 describes three subtypes of impulsivity namely, Attention Impulsivity (Attention and Cognitive Instability), Motor Impulsivity (Motor and Perseverance) and Nonplanning Impulsivity (Self-Control and Cognitive Complexity). Sensation Seeking was measured using the Sensation Seeking Scale devised by Basu et al. (1993). Sensation Seeking Scale has four dimensions namely, Thrill and Adventure Seeking, Disinhibition, Boredom Susceptibility and Experience Seeking.

For measuring Mental Health, the WHO Measure of Mental Health adapted for use in India by Wig (1996) was used. It has three dimensions viz. Being Comfortable with Self, Being Comfortable with Others and Perceived Ability to Meet Life’s Demands.

For measuring dimensions of Stress, the Stress Symptoms Rating Scale developed by Heilbrun and Pepe (1985) was used and Perceived Stress Scale by Cohen et al. (1983) was used to measure Perceived Stress.

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 Avoidant Coping.

Perceived Parental Bonding was measured using Parental Bonding Instrument by Parker et al. (1979). It has two dimensions viz. Perceived Parental Care and Perceived Parental Overprotection.

Satisfaction with Life was measured by using Satisfaction with Life Scale, developed by Diener et al. (1985).

Perceived Social Support was measured using Perceived Social Support Scale developed by Nehra et al. (1996). Rating scales were used to measure perceived health status and perceived happiness status of the adolescents.
In addition, Satisfaction with time spent with Father, Bonding with Father, Satisfaction with time spent with Mother, Bonding with Mother, Perceived Health Status and Perceived Happiness Status were assessed on a ten point rating scale.

The raw scores were analyzed using appropriate statistical analyses viz. Descriptive Statistics, t-test, ANOVA (4X2), Post Hoc Analysis, Intercorrelation Analysis and Stepwise Multiple Regression Analysis.

**GROUP COMPARISONS**

**t- ratios**

Table 2.1, showing mean scores and t-ratios, comparing adolescents with and without gambling tendencies revealed that significant differences emerged between the two groups on the following variables: Problem Gambling Severity Index Scores, South Oaks Gambling Screen- Revised Adolescents Scores, Young’s Diagnostic Questionnaire Scores, Kimberly Young’s Gambling Test, Being Comfortable with Self, Perceived Ability to Meet Life Demands, Total Mental Health, Stress Symptoms, Task Focused Coping, Avoidant Coping, Satisfaction with Life, Perceived Maternal Care, Perceived Maternal Overprotection Perceived Paternal Care, Perceived Paternal Overprotection, Disinhibition, Experience Seeking, Thrill and Adventure Seeking, Total Sensation Seeking, Perceived Social Support, Locus of Control, Psychoticism, Social Desirability, Perceived Stress, Attention Impulsivity (Total), Attention, Cognitive Instability, Motor Impulsivity (Total), Motor, Perseverance, Nonplanning Impulsivity (Total), Self-Control, Cognitive Complexity, Total Impulsivity, Satisfaction with time spent with Father, Bonding with Father, Satisfaction with time spent with Mother, Bonding with Mother and Perceived Happiness.

Table 2.2, showing mean scores and t-ratios, comparing adolescents with social gambling tendencies and adolescents without gambling tendencies revealed that significant differences emerged between the two groups on the following variables: Being Comfortable with Self, Total Mental Health, Satisfaction with Life, Perceived Maternal Care, Perceived Maternal Overprotection, Perceived Paternal Care, Perceived Paternal Overprotection, Perceived Social Support, Psychoticism, Perseverance, Cognitive Complexity, Nonplanning Impulsivity (Total), Bonding with Father, Satisfaction with time spent with Mother and Bonding with Mother.
Table 2.3, showing mean scores and t-ratios, comparing adolescents with at-risk gambling tendencies and adolescents without gambling tendencies revealed that significant differences emerged between the two groups on the following variables: Being Comfortable with Self, Being Comfortable with Others, Perceived Ability to Meet Life Demands, Total Mental Health, Stress Symptoms, Task Focused Coping, Satisfaction with Life, Perceived Maternal care, Perceived Maternal Overprotection, Perceived Paternal Care, Perceived Paternal Overprotection, Experience Seeking, Perceived Social Support, Cognitive Instability, Attention Impulsivity (Total), Perseverance, Motor Impulsivity (Total), Total Impulsivity, Satisfaction with time spent with Father, Bonding with Father, Satisfaction with time spent with Mother, Bonding with Mother, Perceived Health Status and Perceived Happiness Status.

Table 2.4, showing mean scores and t-ratios, comparing adolescents with problem gambling tendencies and adolescents without gambling tendencies revealed that significant differences emerged between the two groups on the following variables: Being Comfortable with Self, Being Comfortable with Others, Perceived Ability to Meet Life Demands, Total Mental Health, Stress Symptoms, Task Focused Coping, Satisfaction with Life, Perceived Paternal Care, Perceived Maternal Overprotection, Perceived Paternal Care, Perceived Paternal Overprotection, Boredom Susceptibility, Experience Seeking, Total Sensation Seeking, Perceived Social Support, Internality (Locus of Control), Perceived Stress, Attention Impulsivity (Total), Attention, Cognitive Instability, Motor Impulsivity (Total), Motor, Perseverance, Nonplanning Impulsivity, Self-Control, Cognitive Complexity, Total Impulsivity, Satisfaction with time spent with Father, Bonding with Father, Satisfaction with time spent with Mother, Bonding with Mother, Perceived Health Status and Perceived Happiness Status.

Table 2.5, showing mean scores and t-ratios, comparing adolescents with at-risk gambling tendencies and adolescents with social gambling tendencies revealed that significant differences emerged between the two groups on the following variables: Being Comfortable with Self, Being Comfortable with Others, Perceived Ability to Meet Life Demands, Total Mental Health, Stress Symptoms, Satisfaction with Life, Perceived Paternal Care, Perceived Social Support, Attention
Impulsivity (Total), Cognitive Instability, Motor Impulsivity (Total) and Total Impulsivity.

**Table 2.6**, showing mean scores and t-ratios, **comparing adolescents with problem gambling tendencies and adolescents with social gambling tendencies** revealed that significant differences emerged between the two groups on the following variables: Being Comfortable with Others, Perceived Ability to Meet Life Demands, Total Mental Health, Stress Symptoms, Satisfaction with Life, Avoidant Coping, Boredom Susceptibility, Total Sensation Seeking, Perceived Stress, Attention Impulsivity (Total), Attention, Cognitive Instability, Motor Impulsivity (Total), Motor, Perseverance, Nonplanning Impulsivity, Self-Control, Cognitive Complexity and Total Impulsivity.

**Table 2.7**, showing mean scores and t-ratios, **comparing adolescents with problem gambling tendencies and adolescents with at-risk gambling tendencies** revealed that significant differences emerged between the two groups on the following variables: Stress Symptoms, Boredom Susceptibility, Perceived Social Support, Attention Impulsivity (Total), Attention, Motor Impulsivity (Total), Motor, Perseverance, Nonplanning Impulsivity (Total), Self-Control, Cognitive Complexity and Total Impulsivity.

**ANOVA**

Analysis of variance was conducted with groups and gender as independent variables. 4x2 ANOVA was employed with four levels of groups; three groups of adolescents with gambling tendencies viz., Social gambling tendencies, At-Risk gambling tendencies and Problem gambling tendencies; one group of adolescents without gambling tendencies and two levels of gender viz. (males and females). The effect of these two variables was singly and jointly analyzed for all the variables.

**Analysis of Variance for the Groups**

Analysis of Variance for the groups revealed significant F-ratios for the following variables to be significant viz. Being Comfortable with Self, Being Comfortable with Others, Perceived Ability to Meet Life Demands, Total Mental Health, Stress Symptoms, Task Focused Coping, Avoidant Coping, Satisfaction with Life, Perceived Maternal Care, Perceived Maternal Overprotection, Perceived Parental Care, Perceived Maternal Overprotection, Boredom Susceptibility, Total
Summary

Sensation Seeking, Perceived Social Support, Perceived Stress, Attention Impulsivity (Total), Attention, Cognitive Instability, Motor Impulsivity (Total), Motor, Perseverance, Nonplanning Impulsivity (Total), Self-Control, Cognitive Complexity, Total Impulsivity, Perceived Health Status and Perceived Happiness Status.

Post Hoc Analysis

Post Hoc Analysis of Groups revealed that mean value of adolescents with problem gambling tendencies were significantly different from the other groups of adolescents on Dimensions of Impulsivity viz. Attention Impulsivity, Attention, Cognitive Impulsivity, Motor Impulsivity, Motor, Perseverance, Nonplanning Impulsivity, Self Control, Cognitive Complexity and Total Impulsivity; Dimensions of Sensation Seeking viz. Boredom Susceptibility and Total Sensation Seeking; Dimensions of Mental Health viz. Being Comfortable with Self, Being Comfortable with others, Perceived Ability to Meet Life Demands and Total Mental Health; Stress Symptoms; Perceived Stress; Dimensions of Perceived Parental Bonding viz. Perceived Maternal Care, Perceived Maternal Over Protection, Perceived Paternal Care, Perceived Paternal Over Protection; Perceived Social Support and Satisfaction with Life and Perceived Health Status.

Post Hoc Analysis of Groups revealed that mean value of adolescents with at-risk gambling tendencies were significantly different from the other groups of adolescents on Dimensions of Impulsivity viz. Attention Impulsivity, Motor Impulsivity and Total Impulsivity; Dimensions of Mental Health viz. Being Comfortable with others, Perceived Ability to Meet Life Demands and Total Mental Health; Stress Symptoms; Dimensions of Parental Bonding viz. Perceived Maternal Care, Perceived Maternal Over Protection, Perceived Paternal Care and Perceived Paternal Over Protection; Perceived Social Support and Satisfaction with Life.

Post Hoc Analysis of Groups revealed that mean value of adolescents with social gambling tendencies were significantly different from the other groups of adolescents on Dimensions of Mental Health viz. Being Comfortable with others, Perceived Ability to Meet Life Demands and Total Mental Health; Stress Symptoms; Avoidant Coping; Dimensions of Parental Bonding viz. Perceived Maternal Care, Perceived Maternal Over Protection, Perceived Paternal Care and Perceived Paternal Over Protection and Satisfaction with Life.
Post Hoc Analysis of Groups revealed that mean value of adolescents without gambling tendencies were significantly different from the other groups of adolescents on Dimension of Impulsivity viz. Perseverance; Dimensions of Mental Health viz. Being Comfortable with Self, Being Comfortable with others, Perceived Ability to Meet Life Demands and Total Mental Health; Stress Symptoms; Dimensions of Parental Bonding viz. Perceived Maternal Care, Perceived Maternal Over Protection, Perceived Paternal Care and Perceived Paternal Over Protection and Satisfaction with Life, Perceived Health Status.

**GENDER DIFFERENCES**

*t*-ratios

Table 2.8, showing mean scores and *t*-ratios, comparing male and female adolescents with social gambling tendencies revealed that significant differences emerged between the two groups on the following variables: Boredom Susceptibility, Internality (Locus of Control) and Extraversion.

Table 2.9, showing mean scores and *t*-ratios, comparing male and female adolescents with at-risk gambling tendencies revealed that significant differences emerged between the two groups on the following variables: Social Desirability and Total Impulsivity.

Table 2.10, showing mean scores and *t*-ratios, comparing male and female adolescents with problem gambling tendencies revealed that significant differences emerged between the two groups on the following variables: Being Comfortable with Self, Stress Symptoms, Task Focused Coping, Avoidant Coping, Satisfaction with Life, Perceived Maternal Care, Perceived Paternal Care, Boredom Susceptibility, Total Sensation Seeking, Perceived Social Support, Extraversion, Perceived Stress, Attention Impulsivity (Total), Attention, Motor Impulsivity (Total), Motor, Perseverance, Non-Planning Impulsivity (Total), Self Control, Cognitive Complexity and Total Impulsivity.

Table 2.11, showing mean scores and *t*-ratios, comparing male and female adolescents with gambling tendencies revealed that significant differences emerged between the two groups on the following variables: Avoidant Coping, Perceived Social Support, Perceived Stress, Attention Impulsivity (Total), Attention,
Nonplanning Impulsivity (Total), Self Control, Cognitive Complexity and Total Impulsivity.

Table 2.16, showing mean scores and t-ratios, comparing male and female adolescents without gambling tendencies revealed that significant differences emerged between the two groups on the following variables: Being Comfortable with Others, Total Mental Health, Satisfaction with Life, Perceived Maternal Care, Perceived Paternal Care, Perceived Paternal Overprotection, Externality (Locus of Control), Attention, Cognitive Instability, Perseverance, Motor Impulsivity (Total) and Total Impulsivity.

Analysis of Variance for Gender

Analysis of Variance for gender revealed significant differences between males and females on Task Focused Coping, Avoidant Coping, Satisfaction with Life, Perceived Maternal Care, Boredom Susceptibility, Perceived Social Support, Perceived Stress, Cognitive Instability, Nonplanning Impulsivity (Total) and Total Impulsivity.

INTER-CORRELATION ANALYSIS OF PROBLEM GAMBLING TENDENCIES AND THEIR CORRELATES

Tables of Inter-correlations revealed that Problem Gambling Severity Index Scores obtained by adolescents were significantly and positively related with scores obtained by adolescents on Dimensions of Impulsivity viz. Attention Impulsivity, Attention, Cognitive Instability, Motor Impulsivity, Motor, Perseverance, and Total Impulsivity; Stress Symptoms; Avoidant Coping; Perceived Maternal Overprotection and Perceived Paternal Overprotection among adolescents with gambling tendencies (total sample of gamblers, table-5.1); Dimensions of Impulsivity viz. Attention Impulsivity, Attention, Cognitive Instability, Motor Impulsivity, Motor, Perseverance, and Total Impulsivity; Stress Symptoms and Avoidant Coping among male adolescents with gambling tendencies (table-5.2) and female adolescents with gambling tendencies (table-5.3); Avoidant Coping and Perceived Maternal Overprotection, among adolescents with problem gambling tendencies (table-5.4); Avoidant Coping among male adolescents with problem gambling tendencies (table-5.5) and female adolescents with problem gambling tendencies (table-5.6); Stress Symptoms and Avoidant Coping; among adolescents with at-risk gambling tendencies (table-5.7); Stress Symptoms among male adolescents with at-risk
gambling tendencies (table-5.8); Avoidant Coping among female adolescents with at-risk gambling tendencies (table-5.9); Stress Symptoms among adolescents with social gambling tendencies (table-5.10); Dimensions of Impulsivity viz. Attention and Self Control among male adolescents with social gambling tendencies (table-5.11); Emotion Focused Coping among female adolescents with social gambling tendencies (table-5.12).

However, tables of Inter-correlations also revealed that Problem Gambling Severity Index Scores obtained by adolescents were significantly and negatively related with scores obtained by adolescents on Extraversion, Perceived Maternal Care, Bonding with Father, Bonding with Mother, Being Comfortable with Others, Perceived Ability to Meet Life Demands, Total Mental Health, Satisfaction with Life, Perceived Health and Perceived Happiness among adolescents with gambling tendencies (total sample of gamblers, table-5.1); Being Comfortable with Self, Being Comfortable with Others, Perceived Ability to Meet Life Demands, Total Mental Health and Satisfaction with Life among male adolescents with gambling tendencies (table-5.2) and female adolescents with gambling tendencies (table-5.3); Perceived Stress; Perceived Maternal Care, Satisfaction with Life, Perceived Health and Perceived Happiness among adolescents with problem gambling tendencies (table-5.4); Satisfaction with Life, Perceived Health and Perceived Happiness among male adolescents with problem gambling tendencies (table-5.5); Neuroticism, Extraversion and Satisfaction with Life among adolescents with at-risk gambling tendencies (table-5.7); Perceived Maternal Care among male adolescents with at-risk gambling tendencies (table-5.8); Thrill and Adventure Seeking among female adolescents with at-risk gambling tendencies (table-5.9); Emotion Focused Coping, Perceived Paternal Care and Satisfaction with Life among male adolescent with social gambling tendencies (table-5.11).

REGRESSION ANALYSIS

Regression analysis was done for the adolescents with gambling tendencies (total sample of gamblers), male adolescents with gambling tendencies, female adolescents with gambling tendencies, adolescents with at-risk and problem gambling tendencies, male adolescents with at-risk and problem gambling tendencies, female adolescents with at-risk and problem gambling tendencies, adolescents with at-risk and social gambling tendencies, male adolescents with
at-risk and social gambling tendencies, female adolescents with at-risk and social gambling tendencies, adolescents with problem gambling tendencies, male adolescents with problem gambling tendencies and female adolescents with problem gambling tendencies.

Stepwise multiple regression analysis using the SPSS version 16 was employed.

Regression analysis was run for the criterion variables (i.e. gambling tendencies, at-risk and problem gambling tendencies, at-risk and social gambling tendencies and problem gambling tendencies) and the groups mentioned above. The following variables were entered as common predictors for the same viz. Psychoticism, Extraversion, Neuroticism, Social Desirability, Internal/External Locus of Control, Thrill and Adventure Seeking, Experience Seeking, Disinhibition, Boredom Susceptibility, Attention, Cognitive Instability, Motor, Perseverance, Self Control, Cognitive Complexity, Being Comfortable With Self, Being Comfortable with Others, Ability to Meet Life Demands, Stress Symptoms, Perceived Stress, Task Focused Coping, Emotion Focused Coping, Avoidant Coping, Satisfaction with Life, Perceived Social Support, Perceived Maternal Care, Perceived Maternal Overprotection, Perceived Paternal Care, Perceived Paternal Overprotection, Satisfaction with time spent with Father, Bonding with Father, Satisfaction with time spent with Mother, Bonding with Mother, Perceived Health and Perceived Happiness.

Gambling Tendencies and its Predictors

Table 6.1 shows regression equation for adolescents with gambling tendencies (total sample of gamblers, n = 180). It revealed that five variables turned out to be relevant and were retained as predictors. They explained 40% ($R^2 = .40$) of the variance in the criterion variable. The predictors were Stress symptoms, Perceived Social Support, Motor (Impulsivity), Avoidant Coping and Self Control (Impulsivity).

Table 6.2 shows regression analysis for male adolescents with gambling tendencies (total sample of male gamblers, n=90). It revealed that four variables turned out to be relevant and were retained as predictors. They explained 33% ($R^2=.33$) of the variance in the criterion variable. The predictors were Satisfaction with Life, Perceived Social Support, Avoidant Coping and Perceived Paternal Care.
Table 6.3 shows regression analysis for female adolescents with gambling tendencies (total sample of female gamblers, n=90). It revealed that six variables turned out to be relevant and were retained as predictors. They explained 56% ($R^2 = .56$) of the variance in the criterion variable. The predictors were Stress Symptoms, Motor (Impulsivity), Perceived Social Support, Experience Seeking, Bonding with Father and Self Control Impulsivity.

Table 6.4 shows regression equation for adolescents with At-Risk and Problem gambling tendencies (n=120). It revealed that four variables turned out to be relevant and were retained as predictors. They explained 29% ($R^2 = .36$) of the variance in the criterion variable. The predictors were Stress Symptoms, Stress Symptoms, Being Comfortable with Self and Motor (Impulsivity).

Table 6.5 shows regression equation for male adolescents with At-Risk and Problem gambling tendencies (n=60). It revealed that four variables turned out to be relevant and were retained as predictors. They explained 29% ($R^2 = .29$) of the variance in the criterion variable. The predictors were Stress Symptoms, Being Comfortable with Self, Locus of Control and Cognitive Complexity (Impulsivity).

Table 6.6 shows regression equation for female adolescents with At-Risk and Problem gambling tendencies (n=60). It revealed that two variables turned out to be relevant and were retained as predictors. They explained 33% ($R^2 = .33$) of the variance in the criterion variable. The predictors were Self Control (Impulsivity) and Perceived Social Support.

Table 6.7 shows regression equation for adolescents with At-Risk and Social gambling tendencies (n=120). It revealed that four variables turned out to be relevant and were retained as predictors. They explained 23% ($R^2 = .23$) of the variance in the criterion variable. The predictors were Cognitive Instability (Impulsivity), Satisfaction with Life, Perceived Social Support and Being Comfortable with Self.

Table 6.8 shows regression equation for male adolescents with At-Risk and Social gambling tendencies (n=60). It revealed that two variables turned out to be relevant and were retained as predictors. They explained 19% ($R^2 = .19$) of the variance in the criterion variable. The predictors were Cognitive Instability (Impulsivity) and Boredom Susceptibility.
Table 6.9 shows regression equation for female adolescents with At-Risk and Social gambling tendencies (n=60). It revealed that three variables turned out to be relevant and were retained as predictors. They explained 32% ($R^2 = .32$) of the variance in the criterion variable. The predictors were Stress Symptoms, Being Comfortable with Self and Cognitive Complexity (Impulsivity).

Table 6.10 shows regression equation for adolescents with Problem gambling tendencies (n=60). It revealed that two variables turned out to be relevant and were retained as predictors. They explained 14% ($R^2 = .14$) of the variance in the criterion variable. The predictors were Satisfaction with Life and Psychoticism.

Table 6.11 shows regression equation for male adolescents with Problem gambling tendencies (n=30). It revealed that one variable turned out to be relevant and was retained as predictor. It explained 18% ($R^2 = .18$) of the variance in the criterion variable. The predictor was Satisfaction with Life.

Table 6.12 shows regression equation for female adolescents with Problem gambling tendencies (n=30). It revealed that one variable turned out to be relevant and was retained as predictor. It explained 23% ($R^2 = .23$) of the variance in the criterion variable. The predictor was Psychoticism.

One may conclude that clear differences between adolescents with gambling tendencies and adolescents without gambling tendencies were revealed. Results also revealed great pathological tendencies for females with gambling tendencies in comparison to males with gambling tendencies.