



**ORIGINAL RESEARCH PAPER**

**Psychiatry**

**PERSONALITY PROFILE IN EARLY-ONSET AND LATE-ONSET TYPOLOGIES OF ALCOHOL DEPENDENCE SYNDROME.**

**KEY WORDS:** Alcohol Dependence Syndrome; Early-onset; Late-onset; Personality Profile; Typology.

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**ABSTRACT**

**Background:** Alcohol dependence syndrome (ADS) is a heterogeneous disorder with multifactorial etiology and a major public health issue. Recognition of this heterogeneity has led researchers to identify various typologies of ADS. Age-of-onset of ADS is an important unidimensional construct and is influenced by various personality traits. To understand this intricate relationship the current study was undertaken with an aim to assess and compare personality profile in early onset and late onset typologies of ADS. **Methodology:** Patients diagnosed with ADS as per ICD-10 criteria by a qualified Psychiatrist, were included. The patients were assessed using composite semi-structured sociodemographic and alcohol use proforma, Severity of alcohol dependence questionnaire, Multiphasic Personality Questionnaire, Sensation Seeking Scale-Form V (modified) and Eysenck's Personality Inventory. A cross-sectional descriptive study was done by dividing the sample (100 subjects) into 2 groups, (50 subjects in each group) based on the age-of-onset of ADS as EO-ADS ( $\leq 25$  years) and LO-ADS ( $>25$  years). Statistical analysis was done using chi-square, t-test and Fischer's exact test. **Results:** There was statistical difference of very high significance between the EO and LO-ADS groups in the variables of mean age, occupation, age-of-onset of alcohol use and ADS, total duration of alcohol use, SAD-Q score, total Sensation Seeking Scale score, Experience seeking and Disinhibition subscales of SSS, Anxiety, Depression and Hysteria subscales of MPQ, Extraversion and Neuroticism scales of EPI. **Conclusion:** In the light of significant difference in numerous variables between the two groups of EO-ADS and LO-ADS, the current study favours the concept of dichotomous approach in the age-of-onset of ADS based typology for discerning between the distinct psychopathological subtypes of ADS.

**INTRODUCTION:**

Alcohol use has been present in our culture and tradition since antiquity. However, mankind has constantly used and abused alcohol for its pleasurable properties and currently World Health Organization (WHO) reports that alcohol consumption contributes to 3 million deaths each year globally and 5.1 % of the global burden of disease and injury as measured in disability-adjusted life years (DALYs) is attributed to alcohol use.<sup>[1]</sup> The survey on magnitude of substance use in India 2019; by National Drug Dependence Treatment Centre (NDDTC), noted that alcohol was the most common psychoactive substance used by Indians and 14.6% of the population (between 10 and 75 year of age) uses alcohol.<sup>[2]</sup> Alcohol is the leading risk factor for premature mortality and disability among those aged 15 to 49 years, accounting for 10 percent of all deaths in this age group.<sup>[1]</sup> This has raised concerns about the health and the social consequences of alcohol use disorders, which is one of the most challenging of current health problems in most countries with far reaching medical, social and economic consequences.

Alcohol Dependence Syndrome (ADS) is long known to be a heterogeneous and multifactorial disorder with contributions from genetic, personality, social and environmental factors. Recognition of this heterogeneity has led to attempts to identify sub-types of persons with ADS according to a variety of defining indicators, such as onset age, chronicity of problems, patterns of substance abuse, antecedent psychopathology and childhood vulnerability factors.<sup>[3-6]</sup>

Historically, typology in ADS can be broadly classified into - prescientific (pre-Jellinek) period, Jellinek era (1941-1960)

and post Jellinek era<sup>[8]</sup> with more important and researched typologies being the ones given by Jellinek (1960)<sup>[6]</sup>, Cloninger (1981)<sup>[7]</sup>, Buydens-Branchey et.al. (1989)<sup>[8]</sup>, Babor et al. (1992)<sup>[9]</sup> and Lesch et al.<sup>[10]</sup>. Cloninger's Type I ("milieu-limited"), Buydens-Branchey's Late onset and Babor's Type A resembled where environmental risk factors largely determined the drinking pattern. Type II ("male-limited"), Early-onset and Type B resembled in their characteristics of a more rapid course, more severe symptoms, greater psychological vulnerability and poorer prognosis. Of the various typologies attempted, age-of-onset of ADS has emerged as an important factor for segregating subtypes of patients into Early-Onset Alcohol dependence syndrome (EO-ADS) and Late-Onset Alcohol dependence syndrome (LO-ADS).

The pursuit for a discrete 'addictive alcoholic personality' date from the first half of the 20th century leading to studies which have shown ADS patients to have characteristic personality traits.<sup>[11]</sup> Personality traits have important implications for development, prognostic and therapeutic significance and management of ADS.<sup>[12]</sup>

The EO-ADS and LO-ADS typology is influenced by a host of personality factors and the dichotomy is considered advantageous because of its simplicity, phenomenological advancement and potential for immediate clinical application. In spite of numerous studies based on this idea, this unidimensional parameter has had unresolved basic problems regarding its relationship with personality profile and results remains inconclusive. Thus, in an attempt to overcome caveats unresolved so far, the study was done to

assess and compare personality profile in EO-ADS and LO-ADS typology.

**METHODS:**

This was a cross-sectional hospital-based descriptive study. Ethical clearance was obtained from the Institutional ethics committee. The study sample consisted of 100 patients diagnosed to have Alcohol Dependence Syndrome as per International Classification of Diseases-10 (ICD-10). Male subjects in the age group of 18-65 years presenting to department of Psychiatry, Vydehi Institute of Medical Sciences and Research Centre, Bangalore, during the period of study were included after obtaining written informed consent through purposive random sampling.

Cases were divided in to two subgroups, based on the age-of-onset of ADS into,

- i. Early-Onset Alcohol dependence syndrome (EO-ADS): Age-of-onset of ADS ≤ 25 years.
- ii. Late-Onset Alcohol dependence syndrome (LO-ADS): Age-of-onset of ADS >25 years. Sociodemographic details and psychosocial factors were obtained in the composite semi-structured sociodemographic and alcohol use proforma. Severity of ADS was assessed using the Severity of Alcohol Dependence Questionnaire (SAD-Q). Multiphasic Personality Questionnaire (MPQ), Sensation Seeking Scale (SSS- Form V modified) and Eysenck's Personality Inventory (EPI) were applied to assess personality profile.

**Analysis of data:**

Data was tabulated and coded. The collected data were analysed with IBM SPSS statistics software 17.0 Version. Descriptive analysis for socio-demographic and clinical variables was performed using means, standard deviations and proportions. To find the significance in categorical data Chi-Square test and Fisher's Exact test was used. In all the above statistical tools the probability value <0.05 was considered as significant level.

**RESULTS:**

The mean age in the two groups was statistically very highly significant (t = -12.05 p < 0.001), with younger age in the EO-ADS group (31.04 ± 4.01) and older age in the LO-ADS group (44.62 ± 6.89). More EO-ADS subjects were unmarried, from urban areas, educated up to primary level and unemployed. More LO-ADS subjects were married, educated up to middle level, full-time employed and living in nuclear family arrangement. More EO-ADS subjects belonged to urban areas and stayed alone or with friends in comparison to LO-ADS subjects. Sixty two percent of the subjects belonged to upper lower socioeconomic status. There were statistically significant differences between the two groups in the categories of residence, marital status, occupation and living arrangement (Table 1).

EO-ADS subjects had a younger age-of-onset of alcohol use as well as at development of ADS in comparison to LO-ADS subjects. The statistical difference between the two groups was of very high significance for both age-of-onset of use and development of ADS (t = -7.332 p < 0.001). The mean duration of alcohol use in LO-ADS subjects was more with significant difference between EO-ADS and LO-ADS subjects thus suggesting a shorter duration and faster progression from onset to development of dependence in EO-ADS group (t = -5.538 p < 0.001). Higher mean score in SAD-Q was obtained in EO-ADS group in comparison to the LO-ADS group, with statistical difference of very high significance, indicating a greater severity of dependence in EO-ADS group (t = 4.107 p < 0.001). (Table 2)

With regard to the Sensation Seeking Scale - Form V (modified), all the four subscales of -Thrill and adventure seeking, Experience seeking, Disinhibition and Boredom

susceptibility - had statistically significant difference between the study groups with higher scores in EO-ADS subjects in comparison to LO-ADS subjects. The subscales in which the statistical difference between the two groups was of very high significance were Experience seeking and Disinhibition (t= 7.400 p < 0.001 and t= 7.100 p < 0.001). The total Sensation Seeking Scale score had a statistical difference of very high significance with higher mean score obtained in EO-ADS group and a lower mean score obtained in LO-ADS group (t= 8.545 p < 0.001). (Table 3)

In the MPQ assessment, Anxiety, Depression and Hysteria subscale scores were higher in LO-ADS subjects in comparison to EO-ADS subjects, resulting in statistical difference of very high significance between the two groups (t= -6.25 p < 0.001, t= -8.005 p < 0.001 and t= -5.897 p < 0.001). The Psychopathic Deviation scores had a statistical difference of high significance with higher mean scores in EO-ADS group in comparison to LO-ADS group (t= 2.941 p = 0.004). The scores in subscales of Mania, Paranoia, Schizophrenia and Lie/Social desirability were higher in EO-ADS group but were not of statistical difference. (Table 4)

In the EPI, the Extraversion scale had a higher mean score in the EO-ADS group whereas the Neuroticism scale had a higher mean score in the LO-ADS group. There was a statistical difference of very high significance in scores of both Extraversion and Neuroticism scales (t= 17.847 p < 0.001 and t= -15.743 p < 0.001). The Lie scale score was higher in EO-ADS group; however, no statistical difference was present. (Table 5)

**DISCUSSION:**

**1. Sociodemographic Characteristics:** (Table 1)

The study was done by basing the age-of-onset of EO-ADS group as having developed ADS ≤ 25 years and LO-ADS group as having developed ADS >25 years, the age of presentation of the subjects with ADS between the two groups was statistically very significant. This was the tenet that the study was based on and similar findings were seen in by Varma et al. [13], Johnson et al. [14] and Glenn & Nixon. [15] Majority of the study subjects (79%) belonged to urban area, probably owing to the geographical location of the hospital. The Drug Abuse Monitoring System (DAMS) India [16] reported the mean age for initiation into substance use as 24.7 years in rural and 23.1 years in urban areas, thereby finding an early initiation into substance use in urban areas. Availability, accessibility, changing global urban trends and rapid urbanization are all factors that can explain early initiation of alcohol in urban India. Seventy seven percent of the study subjects were married. Among the EO-ADS subjects 62% were married and among the LO-ADS subjects 92% were married. Longitudinal studies done by Bachman et al [17,18], Leonard and Rothbard [19] indicated that marriage itself helps reduce alcohol consumption. Lykouras et al. [20] reported that compared to LO patients, EO patients with ADS were in a higher rate unmarried (p = 0.001). Early cross-sectional studies examining the relationship between marriage and problem drinking, have shown that married young adults have lower problematic use of alcohol than those who are single, and this difference may reflect that young people who drink less may be more likely to marry, or to marry earlier, than those who drink more.

Our study replicated similar findings and this could be probably because marriage ushers in a change in social and recreational activities with married people having fewer evenings out for recreation, attending fewer social events and going lesser to bars and taverns, resulting in delay in the development of ADS. The younger mean age of presentation of EO-ADS group in comparison to LO-ADS group also suggests the likelihood of more LO-ADS subjects to have been married. About 46% of LO-ADS subjects were educated up to middle level and 36% of EO-ADS subjects had a primary

level education. LO-ADS subjects had achieved higher level of education with 12% graduates and 4% post graduates. Prospective and longitudinal studies of EO alcohol abusers indicate that compared to non-abusers, they have less education and in contrast, LO abusers have higher education. Various epidemiological studies have found high school drop-outs and individuals with no formal education to have higher rates of alcohol use.<sup>[21-23]</sup> About 40% of EO-ADS subjects were presently unemployed and 32% of LO-ADS subjects were full-time employed. There was a statistical difference of very high significance between the study groups with more LO-ADS subjects being full-time employed and more EO-ADS subjects being presently unemployed and part-time employed. Unemployment can be a direct consequence of EO-ADS, a possible explanation for the difference between the two groups could be that EO-ADS subjects with lower education may have greater difficulty in attaining high-quality jobs which can serve as turning points in alcohol use trajectories thereby resulting in maintenance of ADS in these subjects. More than half of the subjects belonged to nuclear family which is more prevalent in urban areas, thereby is likely to be found in the current study as more subjects belonged to urban residence. Tsering & Pal found the prevalence of substance use to be significantly more in the students who were living away from their homes.<sup>[24]</sup> This concurs with our study findings in which more EO-ADS subjects were found living with friends/alone. Such living arrangement can be explained in terms of more EO-ADS subjects being younger, unmarried, unemployed therefore with lesser responsibility, lesser interference from family members and relatively more freedom, time and opportunities for continued alcohol use resulting in early dependence. Moreover, EO subjects known to be impulsive are more likely to select into adult-like situations that are compatible with continued alcohol use, such as moving away from the parental home. In contrast, more LO-ADS subjects were found to be married, employed, with more responsibility and thus with greater likelihood of living in a nuclear household. About 62% of the subjects belonged to upper lower socioeconomic status. Similar findings are consistently reported in Indian studies and Soundarya S et.al in their study also found that majority of the patients belonged to the upper-lower class (as per Modified Kuppuswamy scale) and among them, 56.92 per cent (n=37) reported an age at first drink lesser than 21 years.<sup>[26]</sup> With rise in economic standards in general in our country, the population is slowly moving towards middle SES with higher buying powers and this has probably pushed earlier use of alcohol in this group.

**2. Severity of ADS:** (Table 2)

The mean S&D-Q score in EO-ADS group was 33.04 ± 3.428 and in LO ADS group was 29.26 ± 5.532, with more EO-ADS subjects severely dependent than LO-ADS subjects which were moderate-severe dependent, resulted in a statistical difference of very high significance between the study groups. The findings in this study concur with Babor et al.<sup>[9]</sup> and Lee & DiClemente<sup>[26]</sup> and can be explained by more leisure time due to higher unemployment, freedom due to unique living arrangements such as with friends/alone, less responsibility due to unmarried status, rapid progression to ADS, more alcohol consumption, greater psychopathology commonly seen in EO-ADS subjects in comparison to LO-ADS subjects. Such factors and intake patterns contribute to and eventually result in increased severity of ADS in EO-ADS subjects.

**3. Personality Profile:**

**i. Sensation Seeking Scale:** (Table 3)

The four subscales of Sensation seeking scale form V (modified) – Thrill and adventure seeking, Experience seeking, Disinhibition and Boredom susceptibility - all had statistically significant difference between the study groups with higher scores in EO-ADS subjects in comparison to LO-ADS subjects. Sensation seeking has been shown to be the

most powerful predictor of early onset of drug use and abuse across drug categories compared to other personality and psychopathology measures by many authors.<sup>[27-28]</sup> Varma et al.<sup>[13]</sup> reported that in comparison to LO alcohol users, EO users scored higher in all subscales of sensation seeking scale - form V (modified). Total Sensation Seeking (TSS) as well as one of its subscale scores (Boredom susceptibility) were found significantly higher in EO subjects. Studies done by Andrucci et al.<sup>[27]</sup> indicated that the Disinhibition and Experience seeking subscales may be better predictors of the frequency and quantity of alcohol use in adolescents. Babor et al showed Disinhibition to be an important component in alcoholism typologies.<sup>[9]</sup> Dom et al. found higher levels of sensation seeking in early-onset alcohol users compared to late-onset users.<sup>[30]</sup> These findings are in keeping with the theoretical premise that the Type 2 alcohol users of Cloninger are higher on “novelty seeking”.<sup>[31]</sup> EO-ADS subjects are characterised as impulsive, exploratory, excitable, disorderly, distractible, more experimenting, less controlled and averse to repetitive stereotyped experiences of any kind, thereby lending further credence to the findings in the current study. These characteristics help explain the early initiation by way of experimentation and rapid progression to the development of dependence in EO-ADS group subjects.

**ii. Multiphasic Personality Questionnaire (MPQ):** (Table 4)

Many studies extensively using personality inventories and scales have been carried out to evaluate the personality profile in ADS subjects, of which the data pertaining to MMPI and SSS is plenty. Limited research regarding assessment of personality using MPQ is available, as it has been developed and validated specifically for the Indian population. The MPQ profile suggests LO-ADS subjects with more characteristics of Anxiety, Depression and Hysteria dimensions and EO subjects with more characteristics of Psychopathic Deviation, Mania, Schizophrenia and Lie/Social desirability. The high degree of association between EO-ADS and antisocial or psychopathic personality as found in our study has also been noted in literature by Babor et al.<sup>[9]</sup> and Buydens-Branchey et al.<sup>[8]</sup> The present study findings are in agreement with the theory of personality developed by Cloninger of Type 1-Type 2 typology of low novelty seeking, high harm avoidance and high reward dependence in Type 1 subjects,<sup>[31]</sup> suggestive of higher features of Anxiety, Depression and Hysteria. Subjects with EO-ADS have been found to be higher sensation seekers, thrill and adventure seekers, experience seeking, boredom susceptible and disinhibited. These characteristics help explain the significantly higher Psychopathic Deviate subscale scores along with higher Mania, Paranoia, Schizophrenia and Lie subscale scores in EO-ADS group subjects in MPQ profile in the current study. Type 1 alcohol users of Cloninger were proposed to be cautious, fearful, guilt-prone, inhibited, shy, pessimistic, easily fatigable, apprehensive worriers, sentimental and sensitive to social cues, eager to help and please others, warmly sympathetic, industrious, persistent<sup>[31]</sup> and have been found to have lower scores in sensation seeking in the current study, which therefore helps explain significantly higher scores of Anxiety, Depression and Hysteria subscales in LO-ADS subjects.

**iii. Eysenck's Personality Inventory:** (Table 5)

In the EPI, the Extraversion scale had a higher mean score in the EO-ADS group whereas the Neuroticism scale had a higher mean score in the LO-ADS group. Cloninger's typology which initially proposed two major alcohol subtypes proposed Type-1 alcoholism characterised by a later age of onset and neurotic features. Longitudinal study by Cloninger et al, suggested a causal role of neuroticism only in late onset alcohol users.<sup>[31]</sup> Extraversion has been implicated in the early onset of alcohol use disorders by Hill et al.<sup>[32]</sup> Hill and Yuan reported association of alcohol use in youth 8 to 18 years old with Extraversion.<sup>[33]</sup> It has been implicated that the suggested

sociability component of extraversion may be initially associated with early onset heavy drinking. Higher sensation seeking scores and high Psychopathic Deviation found in EO-ADS subjects can help explain their Extraversion profile found in this study. Moreover, lower sensation seeking and higher Anxiety, Depression and Hysteria reported in LO-ADS group helps explain higher Neuroticism profile found in LO-ADS subjects in the present study.

**CONCLUSION:**

The connection between the personality pathology and severity, as well as outcome of ADS, remains a complex and unresolved issue. In the light of very high significant difference in numerous personality traits between the two groups of EO-ADS and LO-ADS, the current study favours the concept of dichotomous approach in the age-of-onset of ADS based typology for discriminating between the distinct psychopathological subtypes of ADS grounded on personality profile. However, the results are not generalizable as the study sample was small and not representative of the community.

**Table 1: Sociodemographic Details (n=100)**

Sociodemographic Variables		EO-ADS (n=50) Mean±SD	LO-ADS (n=50) Mean±SD	Statistical analysis
Age (years)		31.04 ± 4.01	44.62 ± 6.89	t = -12.05 p < 0.001***
Residence	Rural	6 (12%)	15 (30%)	Fisher's Exact Test p = 0.048*
	Urban	44 (88%)	35 (70%)	
Marital status	Married	31 (62%)	46 (92%)	13.06 df = 2 p = 0.001**
	Unmarried	17 (34%)	3 (6%)	
	Divorced	2 (4%)	1 (2%)	
Education	Illiterate	6 (12%)	3 (6%)	11.36 df = 6 p = 0.078
	Primary	18 (36%)	8 (16%)	
	Upto 12th	6 (12%)	7 (14%)	
	Middle	16 (32%)	23 (46%)	
	Graduation	4 (8%)	6 (12%)	
	Post Graduate	0 (0%)	3 (6%)	
Occupation	Never employed			20.21 df = 4 p < 0.001***
	Presently unemployed	3 (6%) 20 (40%)	1 (2%) 9 (18%)	
	Part-time employed	17 (34%)	10 (20%)	
	Full-time employed	9 (18%)	16 (32%)	
	Self employed	1 (2%)	14 (28%)	
Living arrangement	Joint family	12 (24%)	10 (20%)	11.67 df = 3 p = 0.009**
	Nuclear family	23 (46%)	37 (74%)	
	With friends	7 (14%)	2 (4%)	
	Alone	8 (16%)	1 (2%)	
Socioeconomic status	Upper	0 (0%)	0 (0%)	1.79 df = 3 p = 0.618 (NS)
	Upper middle	2 (4%)	2 (4%)	
	Lower middle	6 (12%)	11 (22%)	
	Lower	33 (66%)	29 (58%)	
	Upper lower	9 (18%)	8 (16%)	
	Lower			

**Table 2: Alcohol Use Profile (n=100)**

VARIABLES	EO-ADS (n=50) Mean±SD	LO-ADS (n=50) Mean±SD	STATISTICAL ANALYSIS
Age-of-onset of alcohol use (years)	18.18 ± 1.87	25.14 ± 6.45	t = -7.332 p < 0.001***
Age-of-onset of ADS (years)	24.00 ± 1.069	36.50 ± 5.11	t = -16.924 p < 0.001***
Total duration of alcohol use (years)	12.86 ± 3.429	19.48 ± 7.725	t = -5.538 p < 0.001***
SAD-Q Score	33.04 ± 3.428	29.26 ± 5.532	t = 4.107 p < 0.001***

**Table 3: Sensation Seeking Scale-form V (modified) Scores (n=100)**

VARIABLES	EO-ADS (n=50) Mean±SD	LO-ADS (n=50) Mean±SD	STATISTICAL ANALYSIS
Thrill and adventure seeking subscale score	2.86 ± 1.471	2.16 ± 1.517	t = 2.343 p = 0.021*
Experience seeking subscale score	4.76 ± 1.492	2.62 ± 1.398	t = 7.400 p < 0.001***
Disinhibition subscale score	5.50 ± 1.865	3.06 ± 1.557	t = 7.100 p < 0.001***
Boredom susceptibility subscale score	3.98 ± 1.270	3.24 ± 1.188	t = 3.010 p = 0.003**
Total sensation seeking scale score	17.10 ± 3.743	11.12 ± 3.237	t = 8.545 p < 0.001***

**Table 4: Multiphasic Personality Questionnaire (mpq) Scores (n=100)**

VARIABLES	EO-ADS (n=50)	LO-ADS (n=50)	STATISTICAL ANALYSIS
Anxiety score	7.24 ± 2.911	10.72 ± 2.650	t = -6.25 p < 0.001***
Anxiety cut off	Cut off not met	39 (78%)	Fischer's exact test p = 0.001**
	Cut off met	11 (22%)	
Depression score	2.64 ± 1.549	5.34 ± 1.814	t = -8.005 p < 0.001***
Depression cut off	Cut off not met	43 (86%)	Fischer's exact test p < 0.001***
	Cut off met	7 (14%)	
Mania score	6.54 ± 2.002	6.28 ± 2.374	t = 0.592 p = 0.555
Mania cut off	Cut off not met	20 (40%)	Fischer's exact test p = 0.686
	Cut off met	30 (60%)	
Paranoia score	8.48 ± 1.632	7.96 ± 2.010	t = 1.420 p = 0.159
Paranoia cut off	Cut off not met	13 (26%)	Fischer's exact test p = 0.387
	Cut off met	37 (74%)	
Schizophrenia score	5.30 ± 2.169	5.04 ± 3.017	t = 0.495 p = 0.622
Schizophrenia cut off	Cut off not met	20 (40%)	Fischer's exact test p = 0.161
	Cut off met	30 (60%)	
Hysteria score	1.78 ± 1.130	3.38 ± 1.550	t = -5.897 p < .001***
Hysteria cut off	Cut off not met	48 (96%)	Fischer's exact test p < .001***
	Cut off met	2 (4%)	
Psychopathic deviation score	19.00 ± 3.381	17.16 ± 2.853	t = 2.941 p = 0.004**

Psychopathic cut off	Cut off not met Cut off met	14 (28%) 36 (72%)	20 (40%) 30 (60%)	Fischer's exact test p = 0.291
Lie / social desirability score		4.28 ± 2.425	4.16 ± 1.707	t= 0.286 p = 0.775
Lie / social desirability cut off	Cut off not met Cut off met	19 (38) 31 (62)	26 (52) 24 (48)	Fischer's exact test p = 0.228
Repressor / sensitizer score		16.12 ± 1.913	16.26 ± 2.601	t= -0.307 p = 0.760
Repressor / sensitizer cut off	Cut off not met Cut off met	47 (94) 3 (6)	43 (86) 7 (14)	Fischer's exact test p = 0.318

**Table 5: Eysenck's Personality Inventory (epi) Scores (n=100)**

VARIABLES	EO-ADS n=50 Mean±SD	LO-ADS n=50 Mean±SD	STATISTICAL ANALYSIS
Extraversion score	17.12 ± 3.048	7.30 ± 2.418	t= 17.847 p < 0.001***
Neuroticism score	7.80 ± 3.149	17.46 ± 2.984	t= -15.743 p < 0.001***
Lie score	3.70 ± 1.876	2.96 ± 1.927	t= 1.946 p = 0.055

\*Significant  
\*\*Highly Significant  
\*\*\*Very Highly Significant

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