STUDY OF PERSONALITY TRAITS AND ITS ASSOCIATION WITH DRINKING MOTIVES IN ALCOHOL DEPENDENCE –A CROSS SECTIONAL STUDY

Dissertation submitted to

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In partial fulfillment of the regulations

For the award of the degree of

BRANCH – XVIII

M.D. (PSYCHIATRY)

INSTITUTE OF MENTAL HEALTH

MADRAS MEDICAL COLLEGE,

THE TAMIL NADU DR. M. G. R. MEDICAL UNIVERSITY,

CHENNAI, INDIA

APRIL - 2016

CERTIFICATE

This is to certify that the dissertation titled, "**STUDY OF PERSONALITY TRAITS AND ITS ASSOCIATION WITH DRINKING MOTIVES IN ALCOHOL DEPENDENCE – A CROSS SECTIONAL STUDY"** is the bonafide work of **Dr. HEMA PRIYA M.G**, in part fulfilment of the requirements for the M.D. Branch – XVIII (Psychiatry) examination of The Tamil Nadu Dr.M.G.R. Medical University, to be held in April 2015.

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CERTIFICATE OF GUIDE

This is to certify that the dissertation titled**,** "**STUDY OF PERSONALITY TRAITS AND ITS ASSOCIATION WITH DRINKING MOTIVES IN ALCOHOL DEPENDENCE – A CROSS SECTIONAL STUDY**" is the original work of **Dr. HEMA PRIYA M.G**, done under my guidance submitted in partial fulfilment of the requirements for M.D. Branch – XVIII [Psychiatry] examination of The Tamilnadu Dr. M. G. R. Medical University, to be held in April 2015.

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DECLARATION

I, **Dr. HEMA PRIYA M.G**, solemnly declare that the dissertation titled, **STUDY OF PERSONALITY TRAITS AND ITS ASSOCIATION WITH DRINKING MOTIVES IN ALCOHOL DEPENDENCE – A CROSS SECTIONAL STUDY** is a bonafide work done by me at the Madras Medical College, Chennai, under the guidance and supervision of **Dr. JEYAPRAKASH R.** MD, DPM, Professor of Psychiatry, Madras Medical College. The dissertation is submitted to The Tamilnadu Dr. M. G. R. Medical University towards part fulfilment for M.D. Branch XVIII (Psychiatry) examination.

Place:

Date: **Dr. HEMAPRIYA. M.G**

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INSTITUTIONAL ETHICS COMMITTEE
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CERTIFICATE OF APPROVAL

To
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Dear Dr.Hemapriya M.G.

The Institutional Ethics Committee has considered your request and approved your study titled **"Study of personality traits and its association with drinking motives in alcohol dependence" No.17052015.**

The following members of Ethics Committee were present in the meeting held on 12.05.2015 conducted at Madras Medical College, Chennai-3.

1. Prof.C.Rajendran, M.D.,	: Chairperson
2. Prof.R.Vimala, M.D., Dean, MMC, Ch-3	: Deputy Chairperson
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10. Tmt.Arnold Saulina, M.A., MSW.,	

We approve the proposal to be conducted in its presented form.

The Institutional Ethics Committee expects to be informed about the progress of the study and SAE occurring in the course of the study, any changes in the protocol and patients information/informed consent and asks to be provided a copy of the final report.

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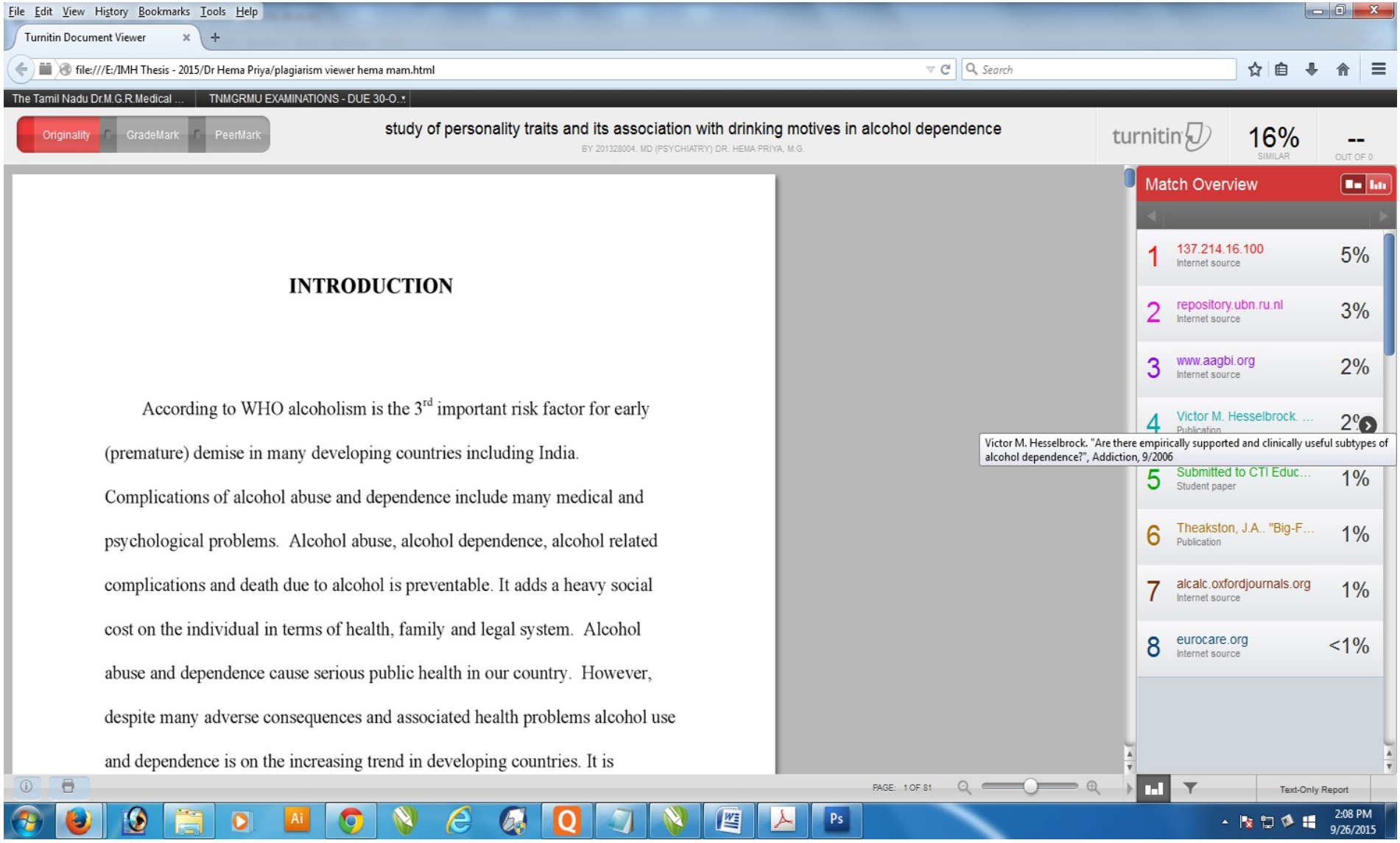
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INTRODUCTION
According to WHO alcoholism is the 3rd important risk factor for early (premature) demise in many developing countries including India. Complications of alcohol abuse and dependence include many medical and psychological problems. Alcohol abuse, alcohol dependence, alcohol related complications and death due to alcohol is preventable. It adds a heavy social cost on the individual in terms of health, family and legal system. Alcohol abuse and dependence cause serious public health in our country. However, despite many adverse consequences and associated health problems alcohol use and dependence is on the increasing trend in developing countries. It is
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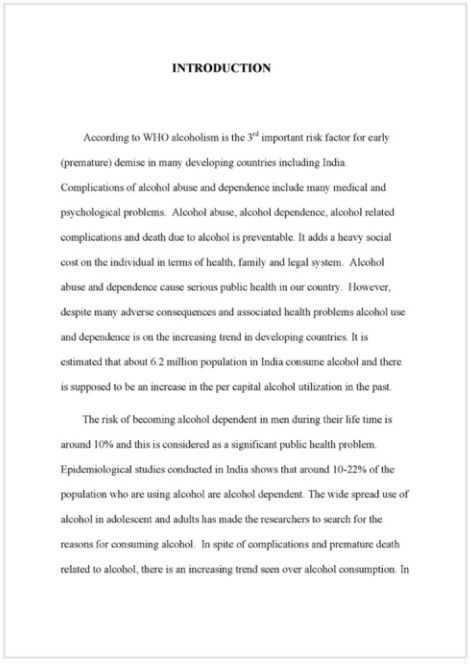

INTRODUCTION

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The risk of becoming alcohol dependent in men during their life time is around 10% and this is considered as a significant public health problem. Epidemiological studies conducted in India shows that around 10-22% of the population who are using alcohol are alcohol dependent. The wide spread use of alcohol in adolescent and adults has made the researchers to search for the reasons for consuming alcohol. In spite of complications and premature death related to alcohol, there is an increasing trend seen over alcohol consumption. In

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alcohol use, considerate efforts are needed for making new laws and policies.

Alcohol dependence is defined as a complex behaviour with unimaginable harmful effects on the work, society, family as well as on the physical and mental health of a person. Alcohol dependence is characterised by craving, compulsion, primacy of drinking over other activities and a state of neuronal adaptation leading to physical and mental disturbance on withdrawal. Alcohol dependence and heavy alcohol intake produces a disastrous effect on the individual, family, and country. Personality traits were considered as fore runners for alcohol use and alcohol dependence, in turn alcohol consumption has a positive reinforcement on the personality traits.

Some studies point out personality traits plays a reasonable role in forming a relationship between biological, social, environmental and psychological factors and future alcohol consumption.(4) The clinical implications appear to be large even if there would be minimal difference in personality between alcohol using population and non alcohol using population are small due to the large population involved.

This current study formerly approves and utilise the five factor personality model which include five big personality traits namely

1) Neuroticism – it is defined as a persistent negative emotional state of an individual. These individuals has marked propensity for anxiety and depressive symptoms.

2) Extraversion – These individual seems to be very friendly, cheerful, bubbling with energy and in expectation of pleasure and positive reinforcement.

3) Openness to experience – these individuals are interested in poems and sensitive to arts. They seem to get lost in imaginative world and are emotionally sensitive.

4) Agreeableness – these individual is modest, honest, truthful, co-operative, trustworthy and has altruistic tendency.

5) Conscientiousness – these individuals are organised, strong-minded, determinant to pursue goals. They strictly follow rules and regulations. They are considered as man of principles and adhere to ethics.

FFM found Neuroticism, Non conscientiousness, Non agreeableness to be associated with problem drinking.

The patterns of drinking continue to be the same despite advertisement and campaigns exposing the alcohol related complications. The campaigns are proved to be futile in the presence of enhanced

motivation for drinking. So it becomes mandatory to know about drinking motives.

DRINKING MOTIVES

Cox and Hinger (1988,1990) (1, 2) developed a model based on motivation in a person taking alcohol in which a person take a decision to take alcohol on the basis of the mood change he expects while drinking. The decision to take alcohol is based on the combination of emotional and rational process taken by the individual. According to the studies drinking motives are divided into two main sub divisions

1) Motives to escape or to cope with personal life problems or negative emotional experience.

2) Motives to celebrate, to enjoy or to be sociable. People who use alcohol in modest amount use especially for social motives. People who use alcohol often enhance their mood is associated with heavy drinking and people who use alcohol as a coping strategy is associated with alcohol dependence. Review of literature points that there is a link between internal drinking motives with the personality dimension but there appears to be no significant linkage between personality dimension and the external motives. Coping was associated with high neuroticism and enhancement with high extraversion and low conscientiousness. The present study gives its contribution to research by analysing the personality traits and its association with its drinking motives.

REVIEW OF LITERATURE

The review of literature is dealt in two sections.

Section - A deals with socio demographic profile of alcohol dependence

Section - B deals FFM personality traits, drinking motives and the association between personality traits and drinking motives.

SECTION A

Socio-demographic profile

Global Socio-demographic profile

Alcohol use is more prevalent in western countries. Jews are considered as highest proportion of people who consume alcohol. But the rate of alcohol addiction is less in Jews compared to other western countries.

Gender: Men are more likely to become binge drinkers compared to women. The male to female alcohol dependency ratio is 5:1.

Education: In the western set up, most of the adults with high education, having college degree drink more frequently than a person who has finished high school. Although alcohol related disorder is present among all the socioeconomic classes, in western countries people

with high education and higher socio economic status are more prone for drinking and alcohol related disorders.

Prevalence of Drinking

Alcohol is one of the favourite drugs used for enjoyment, but only for certain group of individuals, drinking poses a serious problem. Alcohol dependence is considered to produce more harm than many of the illicit drugs like cannabis and opioids. Apart from its psychological dependence, it produces many physical and social complications. In many developed countries, most individuals begin their first drink by early or middle teens. Almost 80% of the students in developed countries have consumed alcohol before high school and more than 60% become alcohol intoxicated once in their life time. Male to female alcohol intake ratio is 1:3 to 1:0 and drinking is more prevalent in the late teens to mid twenties.

Impact of Problem Drinking

Most prevalent causes of death in alcohol related disorders are hepatic disease, suicide, heart disease and cancer. Most of the death in alcoholics is due to accidents done by drunken drivers. 50% of the automobile accidents are considered to occur due to drunken driving. Around 50% of all homicides and 25% of all suicides occur due to alcohol related disorder. The life span of alcohol dependent person

decrease by 10 to 15 years than the normal controls (7) . 22,000 deaths and 2 million non fatal injuries per year have occurred due to alcohol related complications. Long term use of alcohol can produce intense tolerance and adaptation of the body, the cessation of which produces withdrawal syndrome characterised by insomnia, features of autonomic hyperactivity and anxiety.

Etiology of Dependence:

The development of dependence is due to several factors. Common factors include genetic factors, psychological factors, social factors and religious factors. Interaction between genetic and environmental factors contributes for both the medical and psychiatric complications of alcohol. Genetic factors play 60% of the proportion and remaining 40% is influenced by environmental factors.(8) Various theories have been hypothesised for the development of dependence.

Psychological theories

Most individuals are likely to use alcohol as a coping strategy to decrease the tension and feelings of nervousness. Psychological theories have been proposed on the observation done among non alcoholic individuals who are taking alcohol in low dose would ease themselves in a social setting or during a social interaction. It is said to enhance the

mood after a day of difficult work. However, in high doses especially when the level of alcohol in the blood decreases it produces feelings of nervousness. This theory highlights the ability of alcohol to enhance the feeling of being sexually attractive and powerful. Alcohol which is initially utilized to reduce the negative effect plays an important role in the formation of dependence.

Psychodynamic theory

This theory hypothesises that some people use alcohol as a method to decrease unconscious stress and to deal effectively with the harsh super egos. Although many individuals score high in personality tests during the intoxication, withdrawal and recovery phase, most of these characteristics disappear with abstinence. Similarly many children of alcoholics who do not have co morbid disorders usually have higher risk for alcoholism.

Behaviour theory

The decision to take alcohol depends upon the perception about the pleasurable effects of drinking and subsequent reinforcement. It also depends upon the first experience and related events after taking alcohol.

Socio cultural theories

These are based on ethnic or social group pattern of drinking. It is hypothesised that Jews who introduced alcohol to their children in young age have low rates of dependence whereas Irish men who maintain high rates of abstention are associated with high rates of dependence.

Childhood factors

It has been proposed that children who are expected to become alcohol dependent in the future have family history of alcohol dependence(9)

Genetic factors

There are numerous lines of evidence that point out that alcoholism is genetically influenced. There appears to be a 3 to 4 fold risk for alcohol related disorder seen in close relatives of alcoholic people.(10)

Socio-demographic profile in India

Alcohol has become not only a global problem but a major public health issue in India which is influenced by biological, psychological and socioeconomic factors. Although many risk factors contribute to alcohol dependence, researchers have demonstrated significant association with various socio demographic factors. Alcohol dependence is found to be

identified with males mostly, younger age group, lower education status, lower income, lower socio economic status and in unmarried people. (11)

Various studies have shown that earlier age of onset of first alcohol use is associated with dependence in earlier age. It is considered as a predictor of subsequent transitions from the stage of alcohol use to alcohol dependence. (12). Men are more likely to consume and are at a greater risk of developing alcohol dependence than women throughout the world. (13). Many studies have shown lower income and increased alcohol use, whereas others have shown alcohol consumption to be highest in families with high income. Education appears to be concordant with alcohol consumption in developing countries like south Asia. There are numerous studies showing a inverse correlation between education and alcohol use. (14)

SECTION B

Personality and alcohol use

- Personality has considerable part to play in the study of alcohol dependence. Personality is not considered as behaviour specific unlike attitudes, motives and intentions (15). The term personality refers to broad dimensions and would throw insight why the same individuals use substance and also get involved in risky sex and

criminal behaviour. Personality is considered to be stable and enduring for a longer periods in life time. Most of the twin studies done to view the development of personality in an individual claim that personality develops based on the interaction between genetic and environmental factors.

- According to bewley, (16) many individuals who are prone for dependence use alcohol as an important drug to cope with life stresses. He claimed that there is no such term as alcoholic personality but stressed more on the symbiotic relationship between personality disturbance and alcohol misuse. Visser et al (17) claims that the reason given by most of the adolescent for consuming alcohol is to forget their problems.

- **Personality and alcohol dependence**

Personality contributes much to alcohol dependence. In nineteenth century one of the theories for substance addiction was focussed on “degeneracy “of the alcoholic and the existence of an alcoholic personality. Degeneracy was considered to be global concept which is said to be genetically constituted and which includes criminal behaviour, sexual promiscuity along with excess drinking. By twentieth century the most popular psychoanalytic view was that alcoholics have a dependent personality. The possible reason given for dependent personality was due

to the unusual dependence towards their parents during childhood (18). The psycho analytic concept of orality was put forth based on the belief that some individuals are preoccupied with oral consumption. However, many researchers are skeptical about the existence of alcoholic personality. Many debate that there is no specific personality for alcoholism.

Craig Mac Andrew (19,) developed a sub scale (MAC scale) from MMPI and administered to both alcoholic and non alcoholic patients. He revealed that they scored higher and seemed to be courageous, confident, disinhibited sociable individuals who get along well with others. These individuals are described as pleasure, assertive, aggressive, show rebellious urges and resentment towards authorities.

- **The pre alcoholic personality**

Hoffman et al (20) obtained the MMPI scores of college students and compared non alcoholics with individual who later became alcoholics. They found alcoholics had higher sociopaths, impulsiveness and defiance of authority.

It is suggested that while sociopathic deviance is a fact which is well correlated with problem drinking, depression and anxiety leads to problem drinking when an individual drinks to alleviate these feelings.

Petrie et al (21) claimed that alcoholics drink in order to modulate the intensity of stimuli. These individual has a natural tendency to magnify external stimuli and without alcohol they find external stimuli too painful or threatening. One paradox is that alcoholics who consume alcohol to relieve depression and anxiety actually have elevated anxiety and depression after drinking. In other words drinking creates a vicious cycle and positively reinforces and exacerbates alcohol consumption.

Rotters theory says that some individuals explain their behaviour by attributing to internal- external locus of control. Robsenow et al (22) has shown that individual with an external orientation are more likely to become alcohol dependent. Barnes et al has said field dependence is one of the important characteristic in alcohol personality. Based on research it is shown that all problem drinkers depend on alcohol to solve their problems and enhance their mood. Tarter et al (23) model of impulsivity says that alcoholics who are impulsive are not able delay gratification. They also point out that impulsivity and anti social acting out are related to social status. Cahalan et al (24) revealed that young adolescent and adult in lower socioeconomic status are involved in alcoholism. They tend to act out aggressively and involved in anti social activities. In sociological view point, it appears problem drinking stems from social outlook and values rather than personality traits.

Peele et al (25) argues that the term addiction/ dependence for a specific individual are determined by an individual's back ground and environmental factors. A person who is more likely to get addicted to one thing has greater propensity to get addicted to another habit, e.g gambling, over eating.

- **Personality translating into alcoholism**

Tarter et al (26) considered impulsiveness as an important key to alcoholism. It predisposes the individual to problematic drinking. Jessor and jessor et al (27) had put forth a model in which he took in to account personality, the individual's immediate environment and the social groups and values that the individual pursues. He claims that young people who are more interested in achievement and other prosocial activity are not inclined to abuse alcohol whatever their personality may be. For many people alcohol make them feel more powerful or put them at ease socially and lessen their anxiety.

If these people found the circumstances more rewarding and if it appears to encourage antisocial acting out, the individual may go for problem drinking and would engage in acts that has negative consequences. Some people perceive that they are incapable of functioning without alcohol in certain situation. (e.g.,) in parties and in dealing with members of opposite sex. When they are convinced that

their functioning is dependent on alcohol he or she would consume alcohol. However, many people who drink to relax at parties for years together would not become alcohol dependent. When drinking becomes the core of a individuals life style and eventually their self concept, it gives rise to dependence and problem drinking. (28)

- **Five factor personality traits and alcohol use**

To categorise the personality profiles of heavy substance users. (Alcohol dependence), five factor model of personality has been used rampantly by researchers. . For example, Ruiz et al. (29) has established a definite association between Five factor domains and alcohol- related problems. He claims that those who have problem drinking and alcohol dependent have high scores in three domains namely on Neuroticism, Extraversion and Openness, and lower scores on Conscientiousness and Agreeableness domains. Miller et al. (30) states that risk taking behaviour is associated with certain facets of five factor domain.

- **Neuroticism**

It is one of the dimensions of temperament characterised by increased reactivity to stress resulting in experiencing negative emotions frequently (31). These individuals have a pervasive perception that the world is a threatening place and people in the world are dangerous. They

have a persistent belief that they are incapable of managing or coping up with the challenging events in their life. Individual who score high on neuroticism are more likely to experience depressive disorder and anxiety disorder (32, 33). They are more sensitive to criticism and have poor frustration tolerance. They tend to be impulsive and have difficulty in controlling urges, and have trouble in delaying gratification. They are more prone for alcohol use disorders. They first use alcohol as coping strategy or a means to escape from problems.

The term anxiety sensitivity (AS) refers to genetically constituted individual who are more prone for fear arousal related bodily sensations. The individual perceive that sensation is related to impending catastrophic events. (34) Anxiety sensitivity is strongly correlated to increased alcohol consumption and drinking motives in these individuals are related to coping and conformity. [Costa and McCrae (1992) (35) state that Neuroticism is a measure to find an individual's emotional stability and adjustment. Negative feelings such as sadness, fear, anger, embarrassment, guilt, and disgust are experienced predominately by individuals who score high in neuroticism domain. (36) Neuroticism (37) has been found to have a definite association with alcohol use. Individuals who are heavy drinkers use alcohol to enhance the positive

feelings and to decrease the negative feelings. These individuals have been found to have high scores in Neuroticism (38)

In general, Donovan (39) claims heavy drinkers use alcohol frequently as a means of coping during times of stress, anxiety, or depression. Two most important facets of neuroticism are depression and anxiety. One among the maladaptive skill used commonly by alcohol dependence individual to reduce negative feelings is maladaptive coping skill. (40) Impulsivity too has been associated with alcohol dependence. Impulsivity is considered as one of the risk markers of excessive alcohol consumption and problematic alcohol use during adolescence. Impulsivity related traits would include sensation seeking, reward dependent, novelty seeking, positive urgency, negative urgency a lack of premeditation and perseverance.

All these traits are positively correlated with alcohol dependence. It is revealed that problematic alcohol use may be a consequence of a tendency to act rashly when an individual is unable to delay gratification. Colder and Holder (41, 42) found a significant correlation between impulsivity and alcohol consumption in young adolescents and young adults with the traits of sensation seeking. Those who are dominated by or score high on this facet are not likely to resist temptations because they

are controlled by their impulses of which they regret later. Yet they would not learn from experience and tend to repeat the same.

Individuals who score high on impulsivity are likely to engage in more risky behaviours than those who are not impulsive (Holder, et). They also tend to have difficulties abstaining from alcohol because they tend to focus more on short-term gratification than those who are not taking alcohol. The largest association with alcohol consumption was related to positive urgency and novelty seeking whereas the largest association with problematic alcohol use and dependence is related to positive and negative urgency in older adolescent samples. Low impulsivity suggests less alcohol use and smoking, which may decrease the likelihood of using other illicit substances as well.

One of the important facet that is associated with alcohol consumption is vulnerability. According to Bewley, people who are more prone to heavy drinking considered alcohol as a drug to escape from environment stressors and life problems. Anxiety has also been significantly associated to problem drinking and alcohol dependence. Young adolescents who are more prone for anxiety sensitivity (fear of anxiety symptoms) take alcohol more frequently and excessively, leading to dependence than low anxiety sensitive individuals (43)

- Aneshensel et al (44) claims that one of the major factor associated with alcohol consumption is depression which either induces a person to drink or would be a consequence of drinking. Various studies have pointed out that the reason for majority of heavy drinking is depressed mood. Majority of the population consume alcohol in order to overcome their feelings of low self esteem, anxiety and depressive symptoms, failing which they find their environmental circumstances unmanageable. Depressed cognition often gets enhanced with alcohol consumption. Samuel et al (45 ,46), reported that individuals who are likely to become alcohol dependent and problem drinkers, get high scores on impulsivity and “angry hostility” (another facet of Neuroticism). Various studies have pointed out that women were more likely to experience neuroticism, even though gender was not taken into consideration (47).

- The relationship between depressed mood and alcohol consumption were stronger in females than in male adolescents (48). It has been shown that Neuroticism can increase the risk of substance use in women. However, Shedler (49) concluded that abstinent population were neither neurotic nor controlled by the

facets of neuroticism. Neuroticism traits were less frequently reported in abstinent population.

- **Extraversion**

A positive association was reported between the FFM domain of extraversion and alcohol dependence by Ruiz et al . However, in another study by a Leigh et al (50), it was found out that certain thrill-seeking individuals were likely to get involved in both risky sexual behaviours and substance use. They tend to pursue experiences that are adventurous and risky.

A personality based explanation was put forth, in which alcohol use and risk taking sexual practices could be an indication of a sensation seeking or risk taking personality type.

The high excitement seeking seen in these individuals could be attributed to the biologically constituted desire for stimulation, an inclination towards risky behaviours and a greater susceptibility towards the rewarding effects of positive stimuli (51,52,53). All these factors predispose them towards substance use. Sensation seeking individuals get attracted towards the social environment where alcohol is readily accessible. Among students, sociability has been proposed as a factor that contributes to alcohol use. Miller et al (54). Concluded that extraversion

is positively correlated to the number of sexual encounters by the age of twenty, and such individuals were prone for using alcohol before or during a sexual act.

- Individuals who are high in Extraversion also tend to be socially dominant and assertive which may be attractive to potential partners and which may make it easier to pursue opportunities for sexual relations and alcohol consumption. Holder (1998) states that people participating in social situations that do not involve alcohol are less likely to drink alcohol to be sociable. Extraversion is significantly related to multiple high risk sexual behaviours and substance abuse .Two important Facets of Extraversion include high gregariousness (fond of company) and high novelty-seeking traits which make an individual more prone for risk taking behaviour.

- In contrast to findings concerning this dimension of Extraversion Rankin, et al mentioned that certain individuals who are heavy drinkers have scored low in extraversion domain. While Jackson noted people with problem drinking scored high in components of extraversion namely, sociability and impulsivity (55). According to Shedler, Abstainers and individuals who do not take alcohol had difficulty in establishing close and intimate relationship due to the

lack of interpersonal skills. They give a picture of being unsociable, reserved, quiet (i.e. they are introverted) and unempathetic, and they have a low tolerance for criticism (56,57,58). Abstainers are also portrayed as being emotionally insensitive, unsociable, submissive, and with decreased self-confidence (Cook et al).

Openness to Experience

Openness to Experience has also been directly proportional with alcohol use and dependence. Stewart et al (59) concluded that high scores for Openness (adventurousness, venturesome, preference for variety, seeking new stimuli) on the NEO PI-R would predict enhancement – motivated heavy drinking and alcohol dependence. These individuals perceive alcohol and various substances as a new exciting experience.

Agreeableness

Agreeableness was negatively correlated with both drinking quantity and alcohol problems, a finding consistent with the heavy consumption drinking patterns seen in enhancement drinkers (Cooper, 1994) (60). Research portrays the abuser of alcohol as more disagreeable or scoring lower on Agreeableness.(61)

Individuals who found to have scored low in the Agreeableness domain of personality (being egocentric and/or inconsiderate) were using alcohol more frequently than those who score high in agreeableness domain. Low agreeableness individuals are angered easily, disagree on issues, oppositional, have short term relationship which is easily disrupted by frequent conflicts (62).

Conscientiousness

Miller et al .indicated that Conscientiousness, an individual's tendency to think before taking decision, thinking and analysing the consequences of an act, following through moral obligations and duties, and able to withstand in the face of boredom or problems, was inversely related to the use of alcohol. Individuals who lack self-discipline and has the tendency to act impulsively will get involved in a potentially more dangerous activity (having sex while intoxicated), rather than postponing gratification.

According to Kashdan(63), et al Conscientiousness generally protects against alcohol use. People who are conscientious are found to have low impulsivity. They are reported to use less amount of alcohol which may decrease their chance of using other illicit substances. Highly conscientious individuals have greater feelings of personal control and pursue to attain meaningful life, a highly conscientious individual

manifest greater self control which protects them against risky health behaviours. These individuals have a greater propensity to exert self-control when they are exposed to alcohol and are therefore, less likely to use them. (64)

- Parry et al state those abstainers are more interested in achieving their life time goals compared to alcohol users. Most of the abstainers had a negative picture about alcohol and its effects, appear to be obedient and get along with parental wishes. It has been noted that Women reported greater conscientiousness than men (65).

- People who score low in Conscientiousness have low self – discipline which make them more prone for alcohol dependence and the tendency to make hasty and irresponsible decisions (Theakston et al). They are valued as individuals who are highly conservative and moralistic.

- Other researchers however, feel that the nature of being highly conscientious and moralistic may become problematic for abstainers and non alcohol user and it appears that abstainers have reached the level of being over controlled. For example, Shedler et al indicated that Abstainers are able to control themselves and have a tendency to unnecessarily postpone gratification while some

researchers have noted that abstainers seems to be more inflexible and intolerant (66,67). A linear relationship has been established between substance use and Conscientiousness and Openness. Scores for these individuals are found to be high in conscientiousness and low in openness compared to heavy users.

Summary

The review of literature have pointed out that depression and anxiety are related to heavy alcohol usage which are related to the Big Five factor of Neuroticism (Skinner et al) (68). Alcohol in turn has an impact on depression and anxiety.

- Apart from depression and anxiety, it has been indicated that alcohol dependent individual and problem drinkers often appear to be impulsive (Holder, 1998,) (69). which is definite indicator of low Conscientiousness in the FFM (Kashdan et al.,). They tend to think and act without realising the consequences of the act (70,71).

- Low Conscientiousness is directly related to sensation-seeking (Zuckerman, et al), (72) which make these individuals more prone to risky drinking. Research points that low Conscientiousness with either high Extraversion or high scores in openness constitute a

particular personality type which is associated with risk taking behaviours, including alcohol dependence (Vollrath).

- Walton and Roberts (2004) (73) indicate low agreeableness is characteristic feature of alcohol dependence The inference obtained from all the study would be that personality cannot be dominated by a single trait; these findings confirm that the FFM domains of personality, influence or interact with one another and the environment to acquire certain risk behaviours like heavy drinking and alcohol dependence.

The Five Factor Model (FFM)

Since there were no tools to measure personality comprehensively, it became mandatory to conceive a model that can describe human personality (Popkins, 1998) (74) , After the introduction and development of five factor model the association between personality traits and various risk behaviours has gained momentum in recent research. (Trobst et al., 2000) (75).

Personality theories

Results from prospective studies of the prealcoholic personality consistently show the predictive importance of traits relating to impulsivity, sensation seeking, and emotional distress (Barnes, 2000;

Shedler & Block, 1990). Personality traits particularly related to neuroticism appears as direct predictors of the development of harmful drinking behaviour in adolescents (Scheier, 1997).

- Mudler (2002), in a review about personality and alcohol has suggested that two broad bands of personality, impulsivity/novelty seeking and neuroticism/negative emotionality are associated with alcoholism.

Grucza et al. (2006), concluded that novelty seeking (NS) and familial risk interact so that the risk associated with high novelty seeking is magnified in families with parental alcohol dependence and novelty seeking is a moderator of family risk. Accordingly high novelty seeking is strongly associated with alcohol dependence in subjects with a parental history of alcohol dependence.

- Regarding alcohol use in adolescents, Zuckerman (1983), proposed the sensation seeking theory. Khanzitian (1985) espoused the self medication hypothesis emphasizing the role of alcohol in regulating unpleasant affects. In alcoholism, many authors have evaluated the dynamics of the locus of control (Rotter, 1966). A belief in internal control would be indicative of an individual who perceives events as a consequence of his or her own behaviour. By contrast externally oriented individuals perceive events as not

being contingent upon personal actions, but rather influenced by luck, chance.

Typologies in alcohol dependence

Various typologies, some formal and others less formal have been proposed during the past 50 years. Early typologies relied more on theoretically framed, clinical observations. More recently, data-driven, multivariate sub classifications have been derived that have etiological significance and predictive validity and may have clinical utility.

One of the first and most well known was Jellinek's typology consisting of five subspecies of alcoholism simply labelled using the first five letters of the Greek alphabet: alpha, beta, delta, gamma, epsilon (Jellinek. 1960).

During the past 25 years, multivariate typologies have been investigated with the use of more complex data extraction methods (e.g., cluster and factor analysis). Cloninnger's Type I or Type II and Babor's Type A or B were first of these. Cloninger and colleagues (1981), identified two separate forms of alcoholism based on the differences in alcohol-related symptoms, patterns of transmission, and personality characteristics using data derived from a cross-fostering study of Swedish adoptees. Type I characterized by either mild or severe alcohol use in the

probands and no criminality in the fathers. These Type I alcoholics came from relatively high socioeconomic background and were frequently associated with maternal alcohol use. Type I alcoholics are thought to be more responsive to environmental influence, to have relatively mild alcohol-related problems, and to have a late age of onset (older than 25 years). On the other hand, Cloninger's Type II alcoholism is characterized as being associated with a family history, having severe alcohol problem, having other drug use, and having an early onset (before age 25).

Significant relationships between this typology and treatment outcomes have been found. For example, Von Knorring (1987), found that type I alcoholics were more significantly recovered that the type II alcoholics.

A second typology was proposed by Babor and colleagues based on a sample of 321 alcoholic inpatients. Babor's Type A resembled Cloninger's Type I, and was characterized by a later age of onset, fewer childhood behaviour problems and less psychopathology. Type B resembled Type II alcoholism and was defined by a high prevalence of childhood behaviour problems, familial alcoholism, early onset of alcohol problems, more psychopathology, more life stress and a more chronic treatment history (Babor et al. 1992).

Later studies examining typologies have found more than two subtypes that have clinical and etiological significance, particularly regarding gender, and internalizing/externalizing disorders, in addition to family history and age of onset. For example, several multivariate, multidimensional analyses have revealed that there may be as many as four general, homogeneous subtypes of alcohol dependence: chronic/severe, depressed/anxious, mildly affected, and antisocial. These four subtypes of alcohol dependence are found within both genders and across different ethnic subgroups, but more prospective research is needed to examine their relative clinical course and responsiveness to various pharmacological and psychosocial interventions.

Research about alcoholism typologies can compliment alcoholism-personality research by giving layer of understanding to the results of the current study and other studies dealing with personality traits. For example, different personality traits may be related to different typologies

FFM personality traits and personality disorders

Neuroticism personality traits are associated with paranoid, schziotypal, borderline, avoidant, and dependent personality disorders.

Extraversion personality traits is associated with histrionic personality disorders.

Openness to experience is associated with narcissistic personality disorder.

Agreeableness domain is associated with dependent personality disorder.

Conscientiousness domain is associated with obsessive personality disorder.

Drinking motives

Drinking motives are considered as most proximal antecedent based upon which the individual the final decision whether to drink or not. (Carpenter and hasin; cooper 1994). Cox and klinger based on the motivational model indicated that motives are the most proximal and important antecedents of alcohol use, where as other factors such as personality factors influence and modify alcohol use by way of their associations with drinking motives. People take decision to drink based on their perception of experiencing pleasant feelings or it helps them to forget their problems when they are depressed. Four categories of drinking behaviour include

1) Drinking to enhance positive mood or well being (enhancement, positive, internal),

2) To obtain social rewards (social, positive, external),

3) To attenuate or to avoid negative emotions (coping, negative, internal),

4) To avoid social rejection (conformity, negative, external).

- Jung (1997), for example found that among college students drinking during a party or on special occasions were considered as mature motives whereas drinking to increase self confidence or drinking to get hike were considered as immature motives. Those with mature motives drank less than those with immature motives. McCarthy and kaye (1984) revealed a different motivational pattern for different types of alcohol drinkers, heavy drinkers scored on avoidance, social sensation-seeking and enjoyment reasons. Moderate drinkers were mostly women who drank for enjoyment.

Social reasons for drinking is divided into

1) Positive social motives for drinking which include a) for social facilitation (carey1993, 1995) b) for social reasons c) to be social.

2) Negative social motives include

a) Peer pressure labelled as conformity motives (cooper, 1994) e.g. drinking to get accepted in a peer group, not being left out.

b) Social pressure to drink (Carey 1993, 1995)

c) To comply with others

d) Social pressure

e) Peer acceptance.

- **Enhancement motives**: facets that measure enhancement motives are drinking to feel euphoric, to experience pleasant feelings, to get high, to enhance positive emotions and drinking for its taste. (carey 1995, Stewart 1998). Enhancement motives were classified in to

  a) Drinking for enjoyment (carpenter and hasin1998b)

  b) To enhance positive mood (cooper,russel)

  c) For mood enhancement (cronin1997)

  d) To feel pleasant (kairouz, gliksman,denners 2002)

  e) To enhance positive emotions and experience. (Weinberger)

  f) Drinking in order to get drunk.

The sense of feeling the effect of alcohol appears to be highly endorsed by heavy drinkers. College students perceive that getting drunk would increase their pleasant emotions and experience and tend to get higher scores in enhancement domain. Association with people with

similar motives would enhance drinking and is strongly correlated with future alcohol dependence. (hawken and miller 1992, kandel 1996. A person will be motivated to drink further if he did not had any untoward effects during their first drink in the past.

- Physical environment and its mediating effects on a person's cognition play a important role in deciding whether a person would become alcohol dependent in the future. The individual perception about memories of alcohol use propels towards heavy drinking. Some people give importance to the pleasurable short term consequences while ignoring the life threatening long term consequences. There seems to be a both direct neurotoxic effects and indirect instrumental effects which aides alcohol use. When a person is convinced that imbibing alcohol use would lead to peer approval and would enhance positive experience, he would continue in his drinking habit which is considered as a example of instrumental effects of alcohol. The individual attributes to the incentive alcohol use leads towards a hope approach.

- **Coping motives** seems to be associated with heavy drinking and problem drinking. (Cooper, agocha& Sheldon). Drinking to reduce tension or to ease oneself were associated with heavy drinking and dependence. A study conducted in US population included people

in the age group between 21 and 86,individuals who had high level of perceived stress, drank alcohol in order to cope up with stressors.(abbey)

- Alcohol related problems: drinking to cope with negative emotional states is significantly associated with alcohol problems (cooper, Russel). Problem drinkers or alcohol dependence scored higher on coping motives. In addiction there are various articles which gives evidence that alcohol dependence in adulthood is associated with coping motives. (carpenter & hasin). Enhancement motives ranks second in predicting alcohol related problems in a study conducted among young adults in north America (cooper,agocha & Sheldon). Social drinkers are less likely to experience alcohol related problems (cooper). Social drinking was inversely correlated with problem drinking among young adults in United States. In one study social and coping motives were correlated with low academic achievement among US college students (Bradley, Carman). In addition drinking motives are associated with social and legal problems in the individual. Coping motives were correlated to social problems which include drinking during work time, damage to social relationships, accidents,

destruction of properties and trouble with the authorities (Bradley, Carmen & petree).

Gender difference :

Gender difference in coping motives shift from early adolescence to adulthood. In a study done among 13 to 19 years old, girls score higher on coping motives than boys in early adolescence; where as in late adolescence the opposite was observed. (cooper).

- **[FFM model of personality and drinking motives:** Authors emphasize that it is important to include drinking motives when studying the association between personality characteristics and alcohol related outcome (Stewart & Devine). Four factors which include high extraversion, low agreeableness, high neuroticism and low conscientiousness in the FFM were shown to be linked to specific drinking motives. Individual belonging to extraversion drink to increase positive emotional mood and experience. Extraversion domain includes sociability, gregariousness, fond of being in a group, highly active and stimulation seeking (cooper, agocha & Sheldon). It was claimed that person who are extraverted are in search of positive stimuli, get attracted towards alcohol due to its instrumental effects and get involved in enhance motivated alcohol use(gray1982). In one of the study done among college

students reveal individual who drinks to enhance positive emotional states have low scoring in conscientiousness domain. Conscientiousness domain would include responsibility and determination to achieve.(Loukas).It was indicated that individuals who score low in conscientiousness domain have low self discipline and low determination to achieve and pursue their dreams and tend to engage in short term gratification activities e.g. heavy drinking and ignoring the negative and the long term consequences(Stewart & rhino 2001). Certain studies favour the association between low scores in conscientiousness domain and coping motives.

- There is strong evidence that drinking for coping with negative affective state is associated with high levels of neuroticism which include emotional labiality, highly sensitive to criticism, increased self doubt and tendency to brood on the negative experience (cooper,agocha & Sheldon). Neurotic individual who are vulnerable for experiencing negative affect may give more importance in using alcohol to alleviate such feeling (loukal, krull & cirle). Individual scoring high in neuroticism use alcohol as a maladaptive coping method in order to deal effectively with their experience of negative affect. (Stewart, loughlin & rhino 2001).

- Although neuroticism was correlated with all motive dimensions, only coping motives remained significant after having statistically controlled for other motive dimensions. Looking intently at the different facets of the neurotic personality, Stewart & Devine claimed that among students depression facet was most strongly associated with coping motives. In addition to neuroticism, coping motives were shown to be associated with low levels of agreeableness.

- Low level of agreeableness would include trustworthy, good compliance, adequate inter personal relationship (loukas). It states that individual who score low in agreeableness are found to be hostile, self centered and frequently have difference of opinion with others. They tend to experience much more interpersonal conflicts and violence than others.(martin & David) (heaven 1996) and they use alcohol in order to cope with the distress that they encounter in the society. (loukas,krull).]

- According to Stewart et al there appears to no significant association between openness, the fifth dimension of the five factor model of personality with any of the drinking motives (Stewart & Devine 2000)]

AIMS AND OBJECTIVES

AIM:

- To establish the personality traits and its association with drinking motives in alcohol dependence patients

OBJECTIVES:

- **Primary objective :**
- To assess the socio demographic profile in alcohol dependence patients
- To establish personality traits in alcohol dependence.
- To study their motives for drinking alcohol.

SECONDARY OBJECTIVE:

- To evaluate association between personality traits and drinking motives.

NULL HYPOTHESIS

1. There is no difference in the socio demographic profile of alcohol dependent individuals.

2. There is no significant difference in personality traits in alcohol dependent individuals.

3. There is no significant difference in drinking motives in alcohol dependent individuals.

4. There is no association between personality traits and drinking motives.

METHODOLOGY

DESIGN OF THE STUDY

Cross sectional hospital based descriptive study.

SETTING AND POPULATION OF STUDY:

The study was conducted over a period of five months from may 2015 to September 2015 in the deaddiction clinic and in the deaddiction ward of institute of Mental health, Chennai**.**

SUBJECTS

The subjects of this study were patients on treatment for alcohol dependence at the institute of Mental Health and meeting Inclusion or Exclusion criteria.

INCLUSION CRITERIA

1) Patients fulfilling ICD-10 criteria for alcohol dependence.

2) Males aged between 18 – 40 years.

EXCLUSION CRITERIA

1) Alcohol induced psychotic disorder.

2) Other axis one disorders.

3) Co morbid medical complications.

4) Comorbid neurological disorders like mental retardation, epilepsy and dementia.

DEFINITION OF DEPENDENCE

In this study, alcohol dependence is defined as cluster of physiological, behavioural, and cognitive phenomena in which the use of a substance or a class of substance takes on a much higher priority for a given individual than other behaviours that once had greater value.

A definite diagnosis of dependence is made if three or more of the following ICD-10 criteria for dependence syndrome are present at some point during the previous year.

METHODOLOGY

The study was discussed and approved by the ethics committee of the research panel of the institute of Mental health, Chennai. The cases were selected from a screened sample of 120 consecutive patients' from op/ de addiction clinic. The diagnosis was made by using ICD-10 criteria for alcohol dependence. The diagnosis was confirmed by a consultant after carefully ruling out psychotic disorders. Informed consent was obtained from all the patients. Out of 120 patients, 10 expressed unwillingness to participate, 7 had medical complications and 3 had psychotic features and hence they were excluded. Finally, a sample of 100 patients constituted the study group. The instruments were administered at the deaddiction clinic after obtaining an informed

consent. Personality traits in alcohol dependence were assessed using NEO FIVE FACTOR INVENTORY NEO-FFI). The motives of drinking in alcohol dependence were studied using DMQ-R (drinking motives questionnaire revised). Then the relationship between personality traits and drinking motives were assessed.

INSTRUMENT USED

1) ICD -10 criteria for alcohol dependence.

2) FIVE FACTOR INVENTORY (NEO-FFI)

3) Drinking motives questionnaire revised (DMQ-R).

4) Socio demographic profile proforma

ICD -10 Criteria for alcohol dependence

a) A strong desire or sense of compulsion to take the substance

b) Difficulties in controlling substance taking behaviour in terms of its onset, termination, or level of use.

c) A physiological withdrawal state when substance use has ceased or been reduced, as evidenced by the characteristic withdrawal syndrome for the substance; or use of the same substance with the intention of relieving or avoiding withdrawal symptoms;

d) Evidence of tolerance, such that increased doses of the psychoactive substance are required in order to achieve effects originally produced by lower doses (clear examples of this are found in alcohol- and opiate- dependent individuals who may take daily doses sufficient to incapacitate or kill non tolerant users);

e Progressive neglect of alternative pleasures or interests because of psychoactive substance use, increased amount of time necessary to obtain or take the substance or to recover from its effects;

f Persisting with substance use despite clear evidence of overtly harmful consequences, such as harm to the liver through excessive drinking, depressive mood states consequent to periods of heavy substance use, or drug- related impairment of cognitive functioning; efforts should be made to determine that the user was actually, or could be expected to be, aware of the nature and extent of the harm.

NEO FIVE FACTO INVENTORY (FFI)

The most commonly used scale to measure the big five factors of personality is NEO personality inventory (NEO-PI-R) and its short version, the neo five factor inventory (NEO-FFI). The NEO PI-R consists of 240 items measuring 6 facets of each of the five domains. The NEO

FFI consists of 60 statements which are used to measure neuroticism, extraversion, openness, agreeableness and conscientiousness.

The NEO FFI was developed from NEO PI-R by selecting only the items with the highest factor loading for each of the five factors. Total number of items for each facet is 12 in number for each domain. It is rated on a 5 point likert type scale. The short version was beneficial in studies where there is no necessity for detailed assessment of personality and where there is lack of time. Each of the 5 domains of the NEO FFI has been found to possess adequate internal consistency (α- .68 to.86) and temporal stability (γ - .86 to .90). Retest stability in two weeks interval was uniformly high from .86 to .90 for the five scales. The NEO FFI has been translated and interpreted in many languages and has shown high validity and utility in different context. The NEO FFI was shown to be effective in studies related to heritability and adult development. It is also used to predict personality disorders.

DRINKING MOTIVES QUESTIONNAIRE –REVISED (DMQ-R)

The drinking motives questionnaire consists of 20 reasons why an individual might be motivated to drink alcohol. The DMQ-R contains 20 items that are rated on a 5- point likert scale as follows 1- almost never/never to 5- almost always/always. It has got four primary scales namely social, coping, enhancement and conformity. There are no items

that are reverse scored. Replication and validation of the DMQ-R done among adolescents in Switzerland revealed that alcohol use and heavy drinking is strongly associated with enhancement motive followed by coping motives but were negatively correlated with conformity motives. Sub scale scores are then computed by taking the average of rating across each of the five items related to each factor.

It has good internal consistency (α- .91 for enhancement, .91 for social, .79 for conformity, .81 for coping). Scale validity has been done in prior research with adolescents.

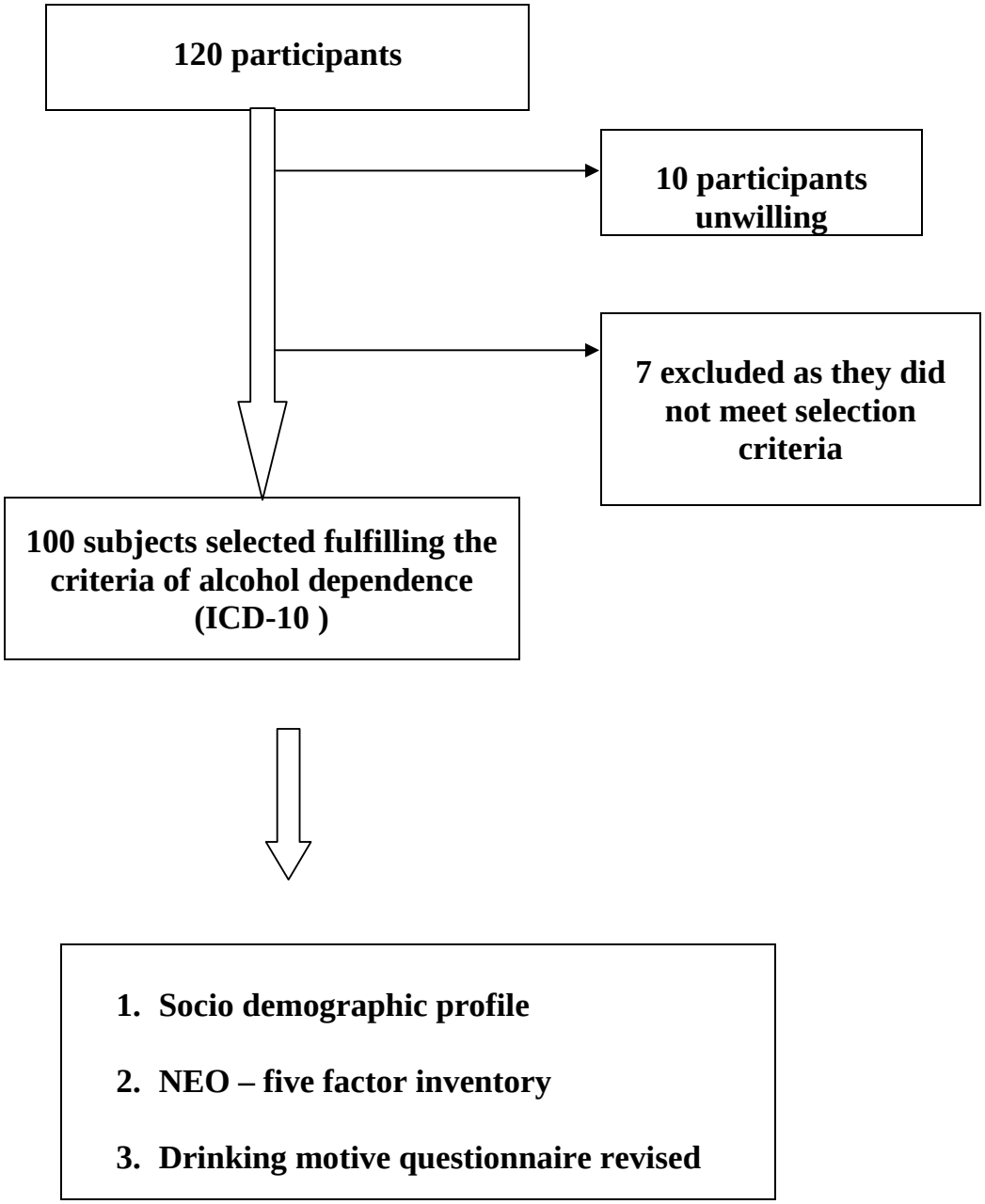
MODIFIED KUPPUSWAMY'S SOCIOECONOMIC SCALE

This scale has been considered as an important tool to measure socio economic status in urban areas. The original version in1976 was updated by mishra and Singh in 2003 and Kumar et al in2007. There is a great demand for the updated version of this scale among researchers due to the changes in inflation rate which in turn change the monetary values of the monthly income range scores.

So there has been a need to provide updated version for the current ongoing research. The latest update was done in 2012 using latest consumer price index numbers for industrial workers-CPI (IW). This

scale was used in this study since most of the individuals are from urban community**.**

Flow chart



DATA ANALYSIS

The results were tabulated and analysed and analysed using the statistical package SPSS 22.0.

Descriptive statistics was used to get the frequency, mean and standard deviation of different variables of socio demographic profile of individual with alcohol dependence.

Chi square test and fishers exact test was used to assess the association between personality traits and drinking motives in alcohol dependent individuals

RESULTS

TABLE 1

Age group in alcohol dependence

Age group	N	%
18 - 25 yrs	14	14.0
26 - 35 yrs	45	45.0
36 - 40 yrs	41	41.0
Total	100	100.0

Figure 1: pie chart for distribution of age group

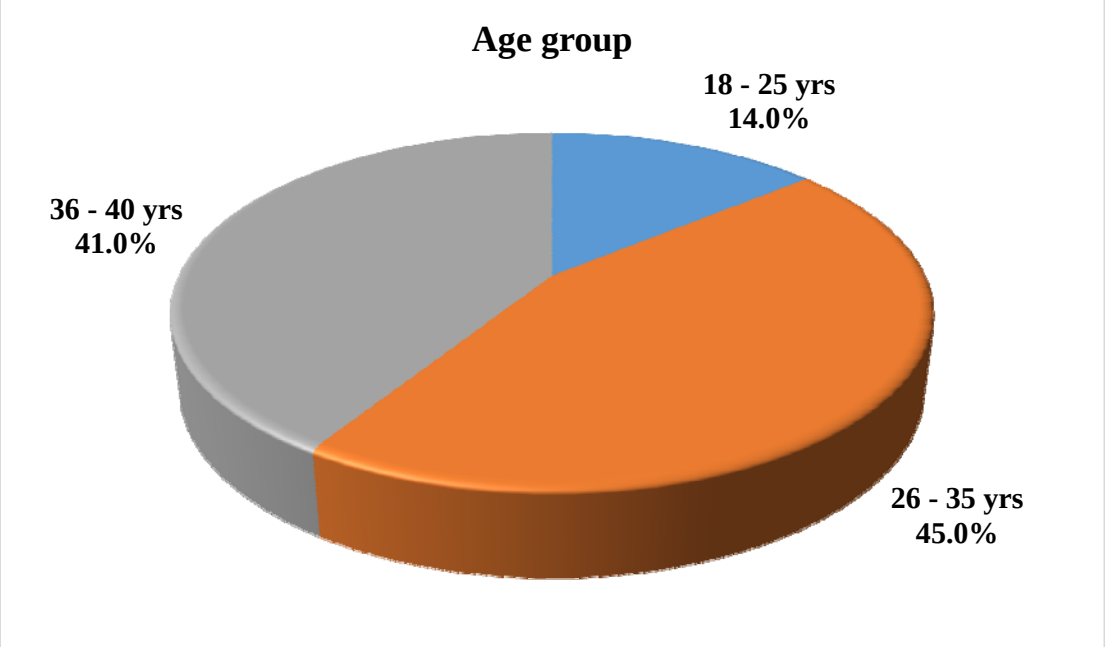


Table 1 and figure 1 show that most of the individual who are alcohol dependent fall between age group 25- 35 years. Around 41 people who are alcohol dependant fall between age group 36 – 40 years. Only 14 person fall between age group 18- 25 years.

TABLE 2

Frequency table for First drink

First drink	N	100
	Mean	17.5
	Standard Deviation	2.5
	Median	18.0
	Minimum	12.0
	Maximum	25.0

Table 2 and figure 2 describe the age of onset of first drink in alcohol dependence individual. The mean age of first drinking is 17.5 years, the minimum age of first drink is 12 years and the maximum age is 25 years**.**

Figure 2: Mean age of first drink

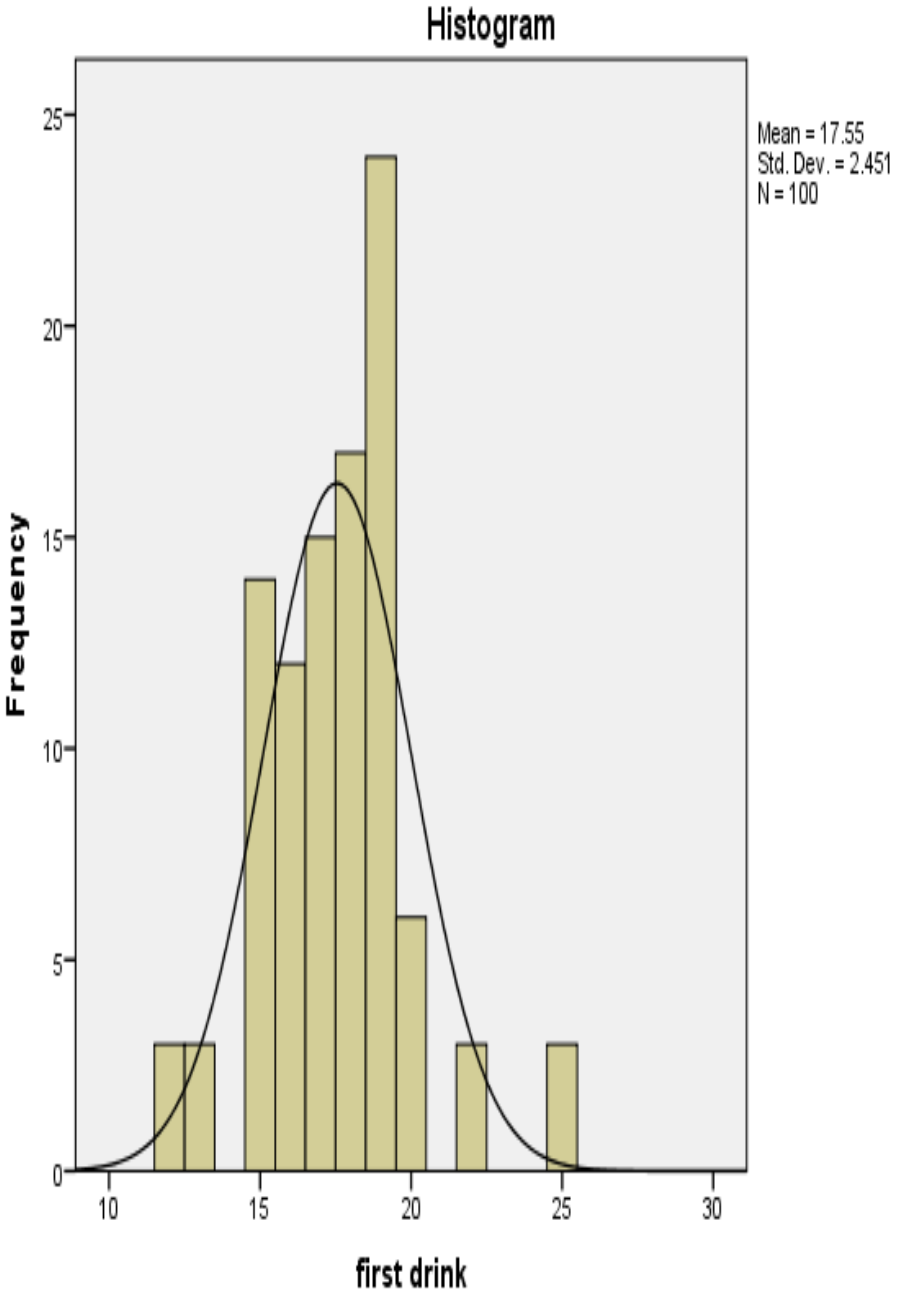
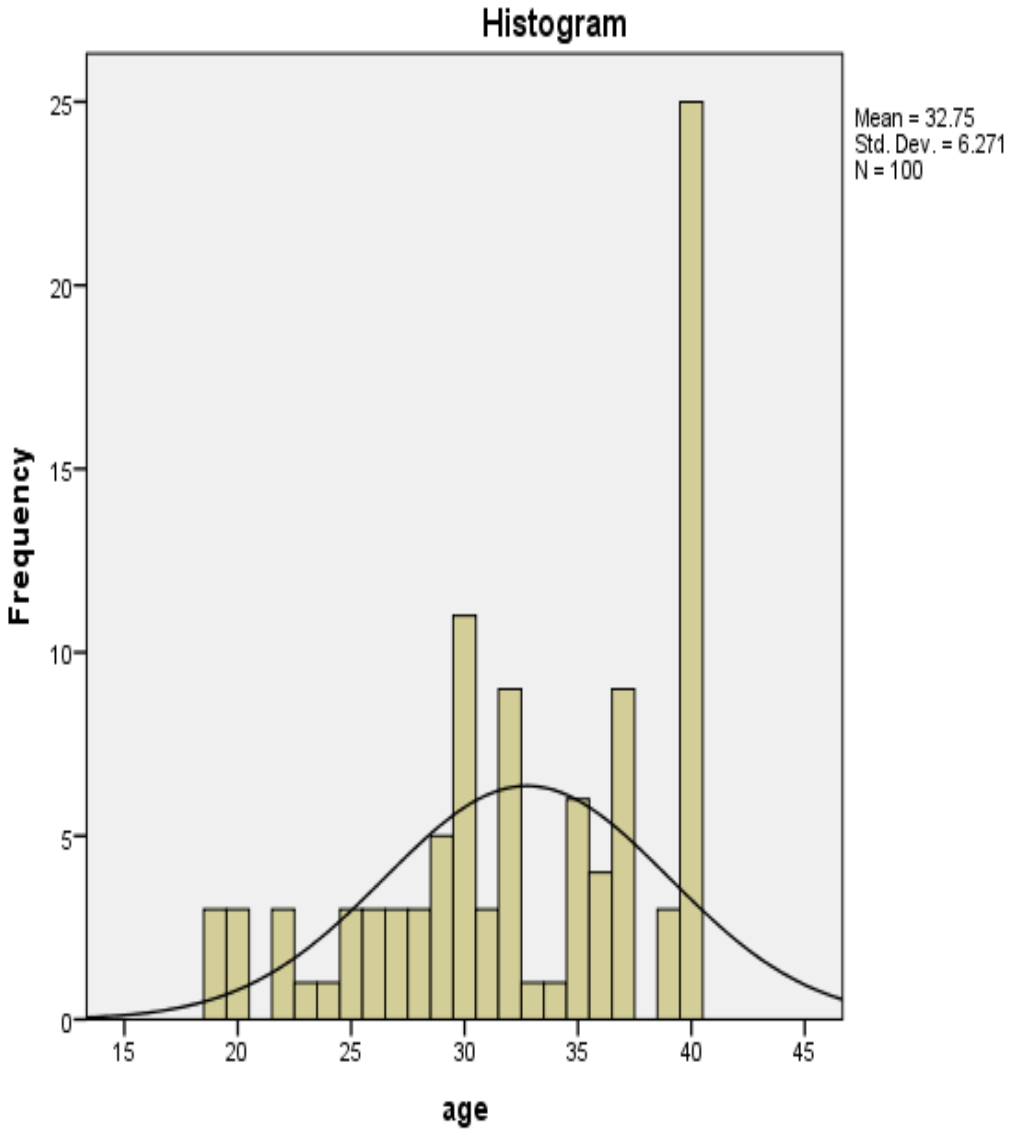


FIGURE : 3 SHOWING MEAN AGE OF PRESENTATION



The mean age of presentation of alcohol dependent individuals in IMH deaddiction clinic was 32.75 years.

TABLE 3: EDUCATIONAL STATUS IN

ALCOHOL DEPENDENCE

Education	N	%
Professional	2	2.0
Graduate	15	15.0
High school	60	60.0
Primary/ Illiterate	23	23.0
Total	100	100.0

FIGURE: 4 showing educational status in alcohol dependence

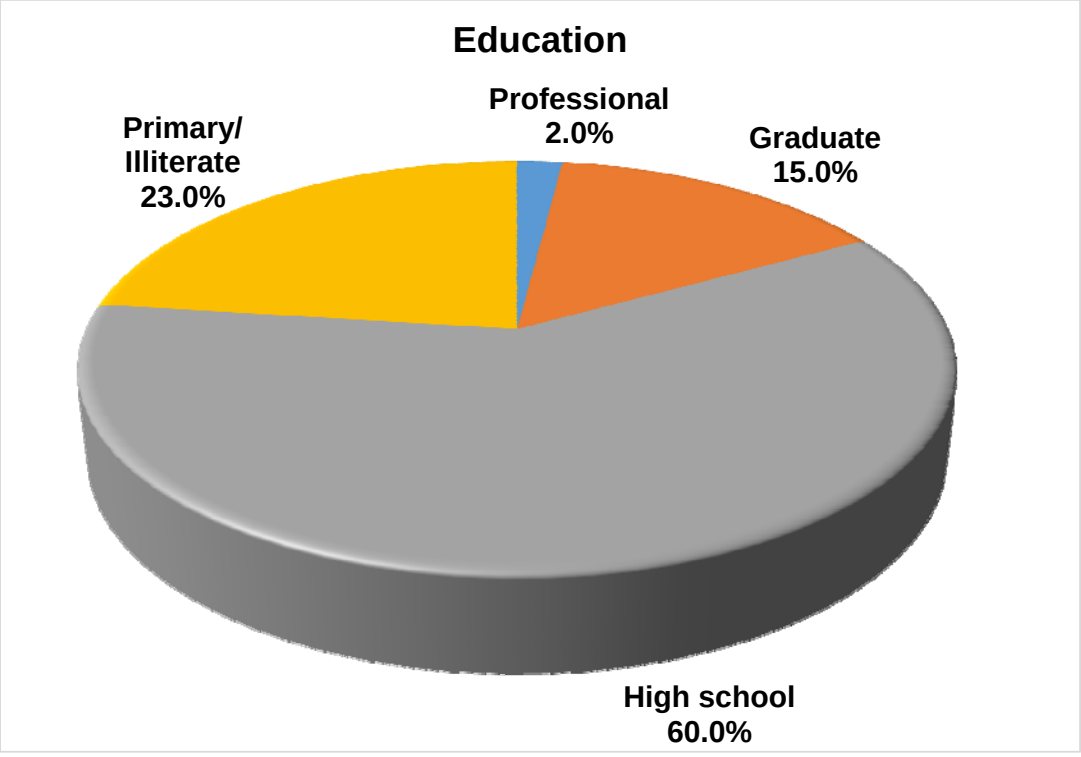


Table 3 and figure 4 describes the educational status of alcohol dependent individuals. Among 100 individuals 60 had high school education, 23 individual had either primary education or illiterates, 15 were graduates and only 2 individuals were professionals.

TABLE 4

Socio economic status in alcohol dependence

SES	N	%
Level-3	21	21.0
Level-4	74	74.0
Level-5	5	5.0
Total	100	100.0

FIGURE: 5 SHOWING SOCIO ECONOMIC STATUS IN ALCOHOL DEPENDENCE

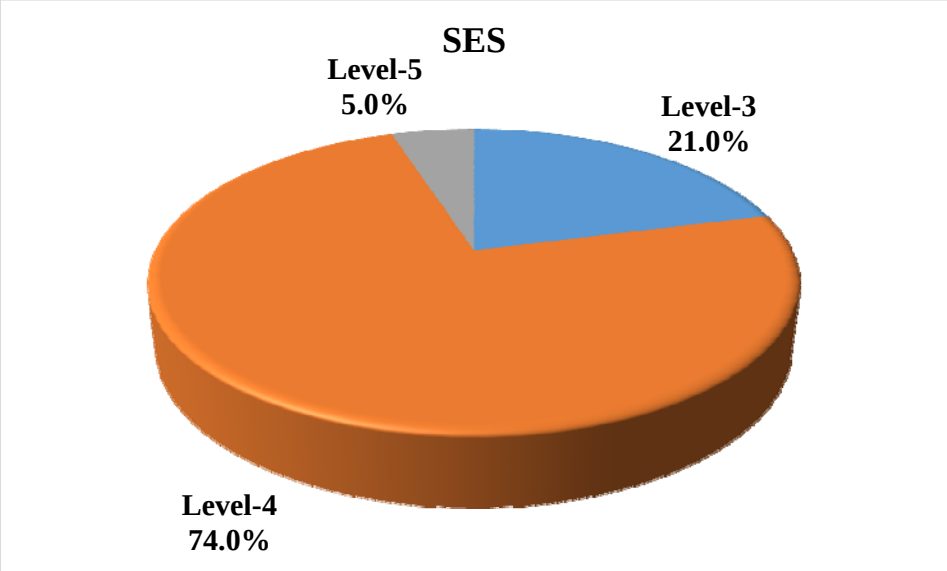


Table 4 and figure 5 describe the socioeconomic status in alcohol dependence individuals. 74% belong to level-4 (lower middle class), 21% belong to level-3 middle class), only 5% belong to level-5 (lower class)

TABLE: 5

Occupation in alcohol dependence

Occupation	N	%
Clerk	4	4.0
Skilled	19	19.0
Unskilled	30	30.0
Unemployed	47	47.0
Total	100	100.0

FIGURE: 6 SHOWING OCCUPATION IN ALCOHOL DEPENDENCE

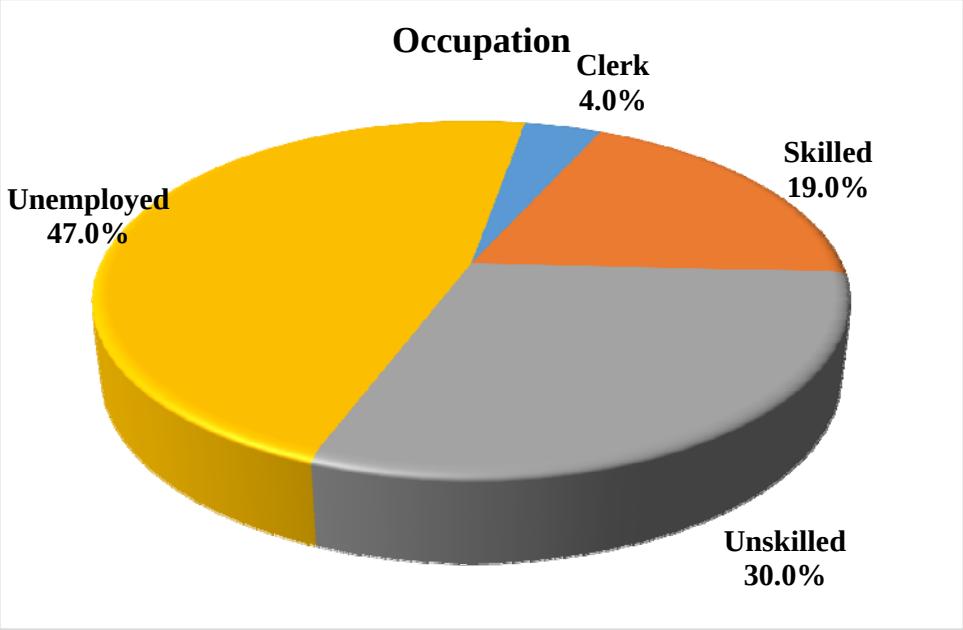


Table 5 and figure 6 describe the occupation in alcohol dependence .47% were unemployed, 30% were unskilled workers, 19% were skilled workers and 4% were clerks.

TABLE: 6

Marital status in alcohol dependence

Marital Status	N	%
Married	34	34.0
Separated	31	31.0
Single	34	34.0
Divorcee	1	1.0
Total	100	100.0

FIGURE: 7 SHOWING MARITAL STATUS IN ALCOHOL DEPENDENCE

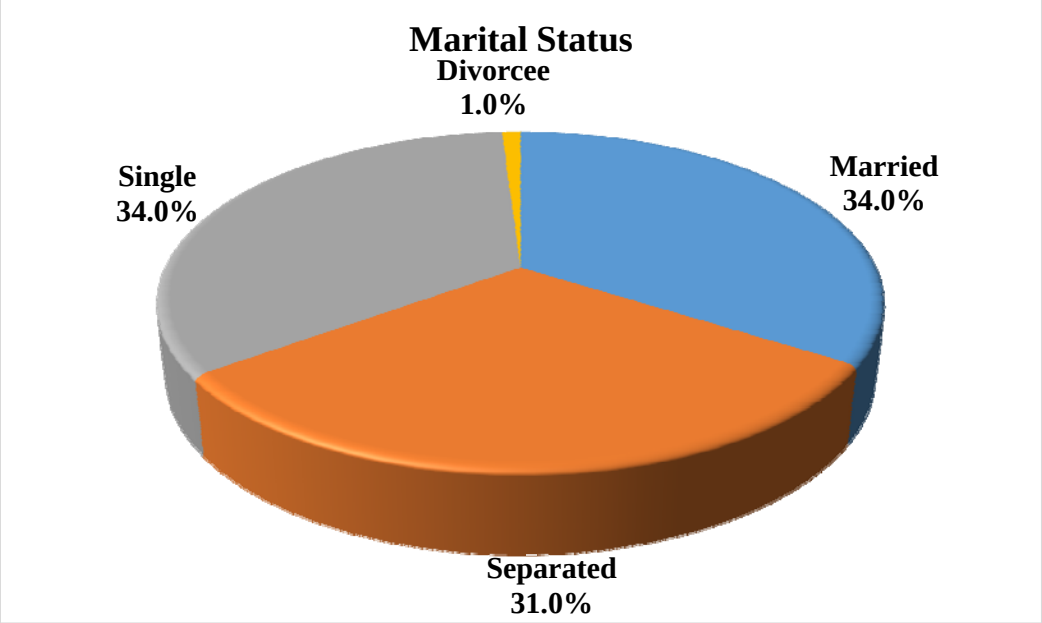


Table 6 and figure 7 describe the marital status in alcohol dependence. 34% were married, 34% were unmarried, 31% were separated and 1% was divorcee.

TABLE: 7

Family type in alcohol dependence

Family type	N	%
Nuclear	60	60.0
Joint	40	40.0
Total	100	100.0

FIGURE: 8 SHOWING FAMILY TYPE IN ALCOHOL DEPENDENCE

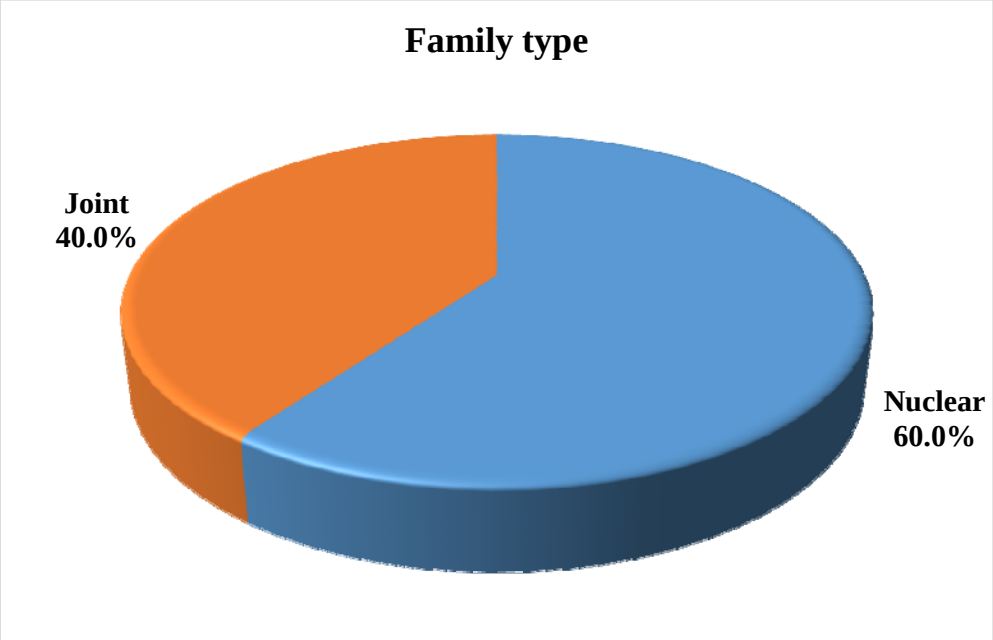


Table 7 and figure 8 describe the family type of alcohol dependence. 60% were living in a nuclear family and 40% were living in a joint family.

TABLE: 8

Religion in alcohol dependence

Religion	N	%
Hindu	72	72.0
Christian	27	27.0
Muslim	1	1.0
Total	100	100.0

Figure 9 : Showing Religion in alcohol dependence

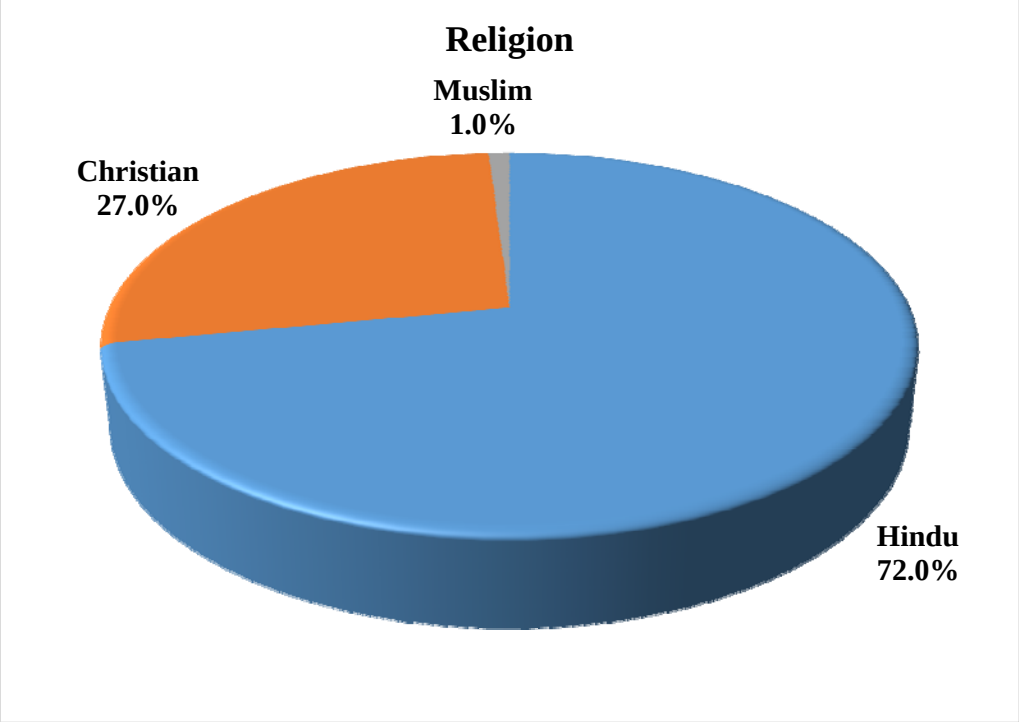


Table 8 and figure 9 describe the religion in alcohol dependence. 72% belonged to Hinduism, 27% belonged to Christianity and 27% belonged to islam.

TABLE : 9

Population area in alcohol dependence

Area	**N**	**%**
urban	76	76.0
rural	24	24.0
total	100	100.0

FIGURE : 10 SHOWING POPULATION AREA IN ALCOHOL DEPENDENCE

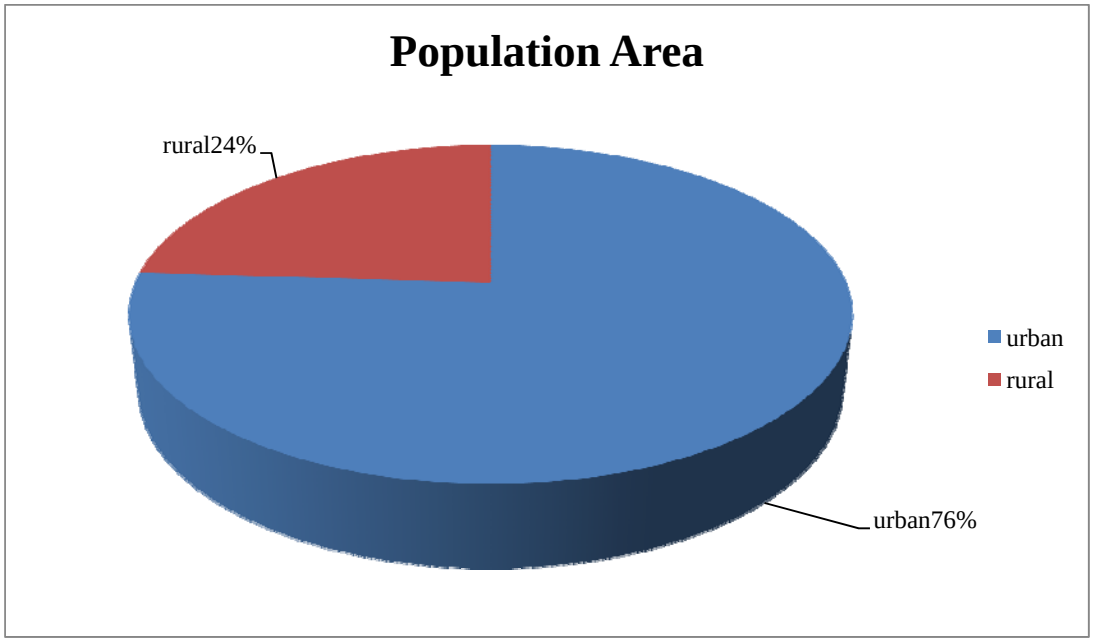


Table 9 and figure 10 shows 76% belonged to urban area and 24% belonged to rural area.

TABLE :10

Family history in alcohol dependence

Family history	N	%
Present	67	67.0
Absent	33	33.0
Total	100	100.0

FIGURE :11 SHOWING FAMILY HISTORY OF ALCOHOL IN ALCOHOL DEPENDENCE

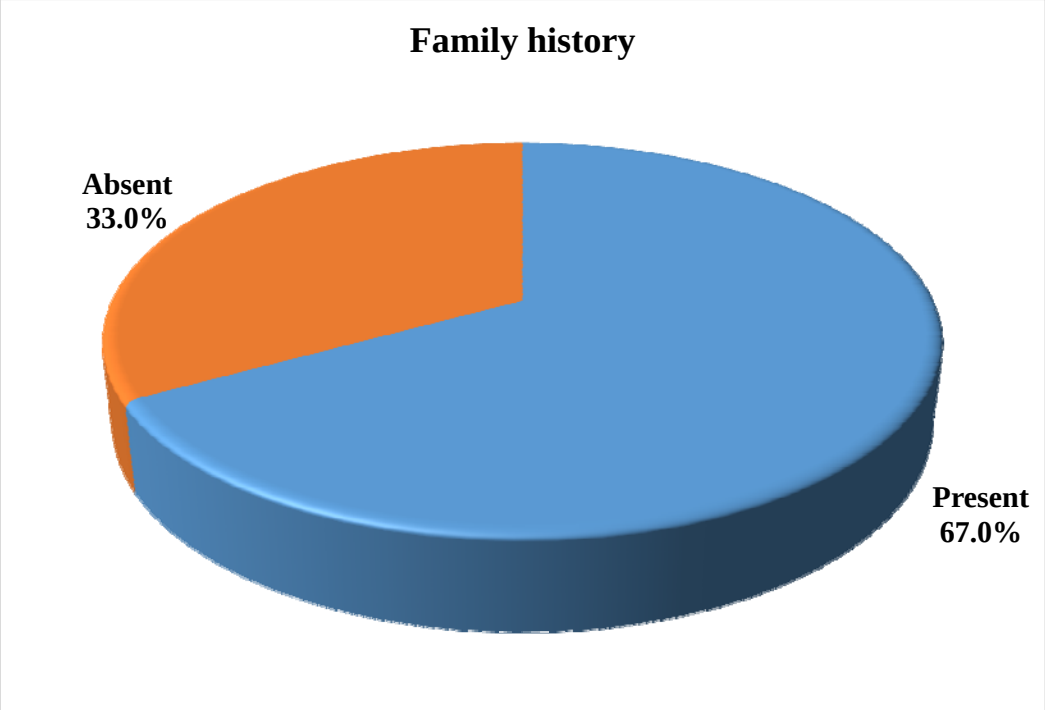


Table 10 and figure 11 describe the family history in alcohol dependence. 67% of the individual had positive family history of alcohol dependence, 33% of the individual with alcohol dependence has negative history of alcohol dependence.

TABLE: 11

Personality traits in alcohol dependence

Personality	N	%
Neuroticism	52	52.0
Extraversion	26	26.0
Openness to experience	13	13.0
Agreeableness	8	8.0
Conscientiousness	1	1.0
Total	100	100.0

FIGURE 12 SHOWING PERSONALITY IN ALCOHOL DEPENDENCE

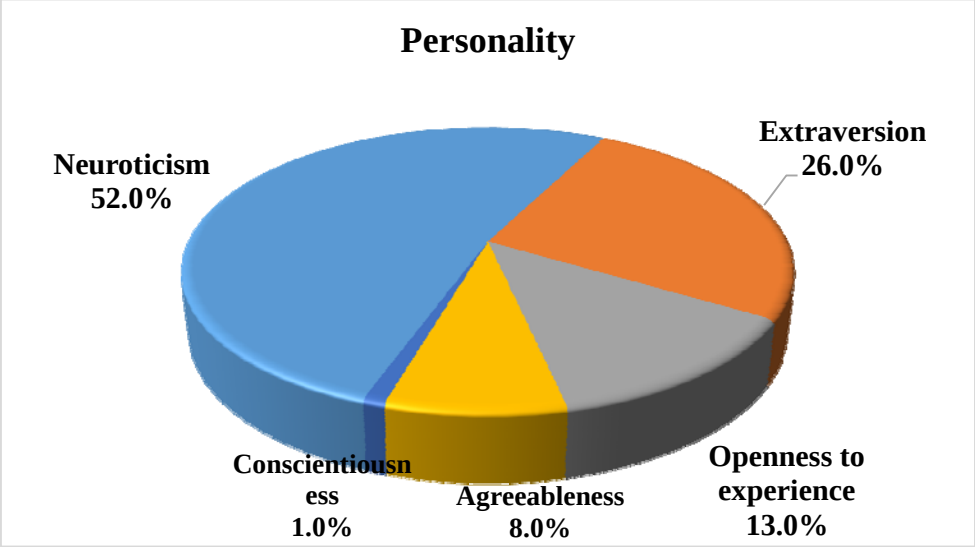


Table 11 and figure 12 describe the personality traits in alcohol dependence individuals. 52% of the individuals with alcohol dependence belong to neuroticism domain, 26% of the individual belong to extraversion domain, 13% of the individual belong to openness to

experience domain, 8% of the individual belong to agreeableness domain and only a negligible percent (1%) belong to conscientiousness domain.

TABLE 12

Drinking motives in alcohol dependence

Motives	N	%
Coping	42	42.0
Enhancement	31	31.0
Social	23	23.0
Conformity	4	4.0
Total	100	100.0

FIGURE : 13 SHOWS MOTIVES IN ALCOHOL DEPENDENCE

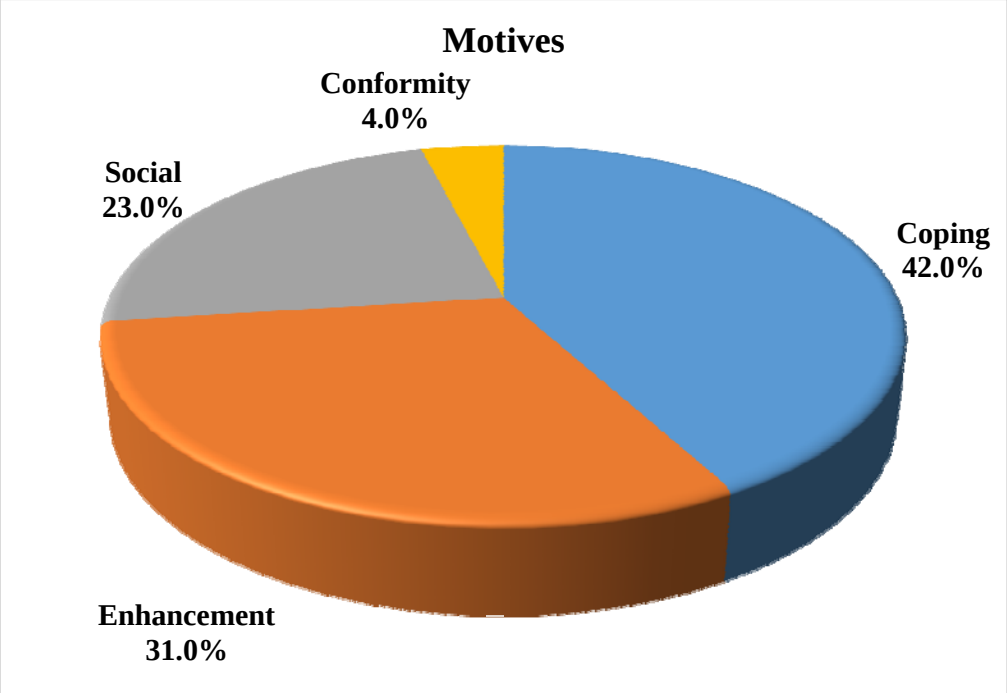


Table 12 and figure13 describe the motives in alcohol dependence individuals. 42% of the individuals with alcohol dependence had coping as their drinking motive, 31%of the individuals had enhancement as their drinking motive, 23% of the individual had social motives and only 4% of the individual had conformity as their drinking motive.

TABLE : 13 DRINKING MOTIVES IN NEUROTICISM

Personality	Motives									
	Coping		Enhancement		Social		Conformity		Total	
	N	%	N	%	N	%	N	%	N	%
Neuroticism	42	80.8	6	11.5	4	7.7	0	.0	52	100.0

FIGURE: 14

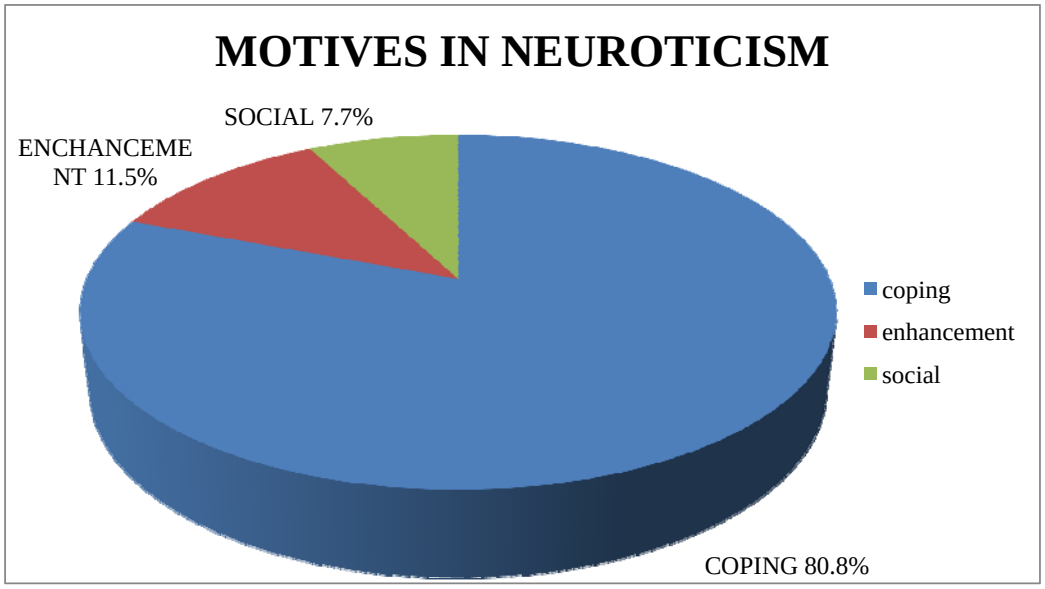


Table 13 and figure 14 describe the motives in neuroticism. 80.8% had coping motives, 11.5% had enhancement motives, 7.7% had social motives.

TABLE: 14

DRINKING MOTIVES IN EXTRAVERSION

Personality	Motives									
	Coping		Enhancement		Social		Conformity		Total	
	N	%	N	%	N	%	N	%	N	%
Extraversion	0	.0	14	53.8	9	34.6	3	11.5	26	100.0

FIGURE: 15

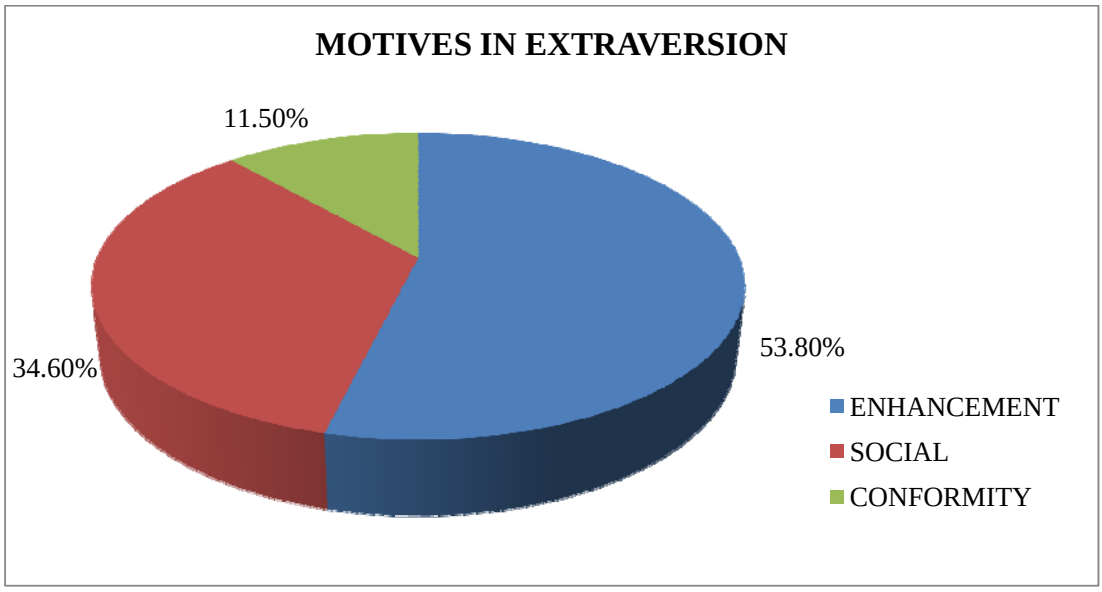


Table 14 and figure 15 shows that 53.80% had enhancement as their motives, 34.60% had social motives and 11.50% had conformity motives

TABLE : 15

DRINKING MOTIVES IN OPENNESS TO EXPERIENCE

Personality	Motives									
	Coping		Enhancement		Social		Conformity		Total	
	N	%	N	%	N	%	N	%	N	%
Openness to experience	0	.0	8	61.5	4	30.8	1	7.7	13	100.0

FIGURE 16

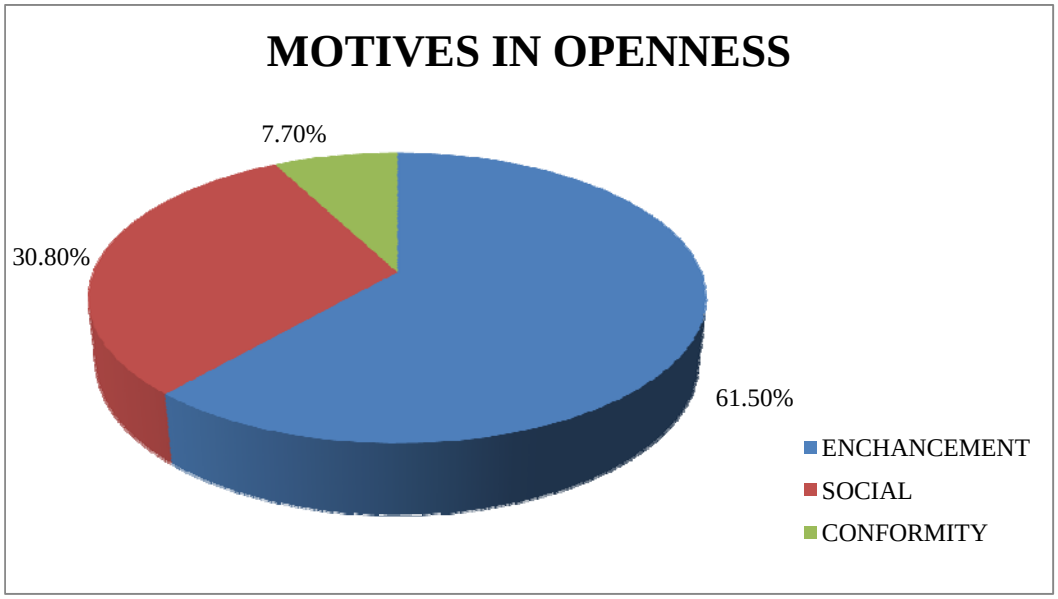


Table 15 and figure 16 shows that 61.50% had enhancement motives, 30.80% had social motives and 7.70% had conformity motives.

TABLE 16

DRINKING MOTIVES IN AGREEABLENESS

Personality	Motives									
	Coping		Enhancement		Social		Conformity		Total	
	N	%	N	%	N	%	N	%	N	%
Agreeableness	0	.0	3	37.5	5	62.5	0	.0	8	100.0

FIGURE 17

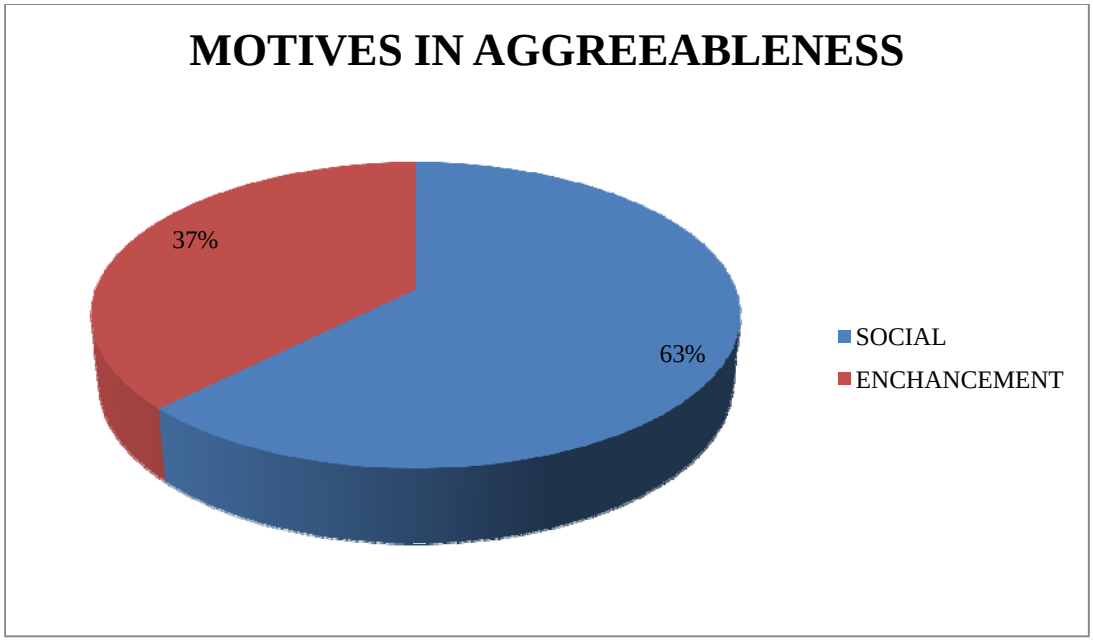


Table 16 and figure 17 shows 63% had social motives and 38% had enhancement motives.

TABLE 17

ASSOCIATION BETWEEN PERSONALITY TRAITS AND DRINKING MOTIVES IN ALCOHOL DEPENDENCE

Chi-Square test to compare the proportions

Personality	Motives									
	Coping		Enhancement		Social		Conformity		Total	
	N	%	N	%	N	%	N	%	N	%
Neuroticism	42	80.8	6	11.5	4	7.7	0	.0	52	100.0
Extraversion	0	.0	14	53.8	9	34.6	3	11.5	26	100.0
Openness to experience	0	.0	8	61.5	4	30.8	1	7.7	13	100.0
Agreeableness	0	.0	3	37.5	5	62.5	0	.0	8	100.0
Conscientiousness	0	.0	0	.0	1	100.0	0	.0	1	100.0
Total	42	42.0	31	31.0	23	23.0	4	4.0	100	100.0

Chi-Square Test	Value	P-Value
Fisher's Exact Test	83.083	<0.001

FIGURE :18

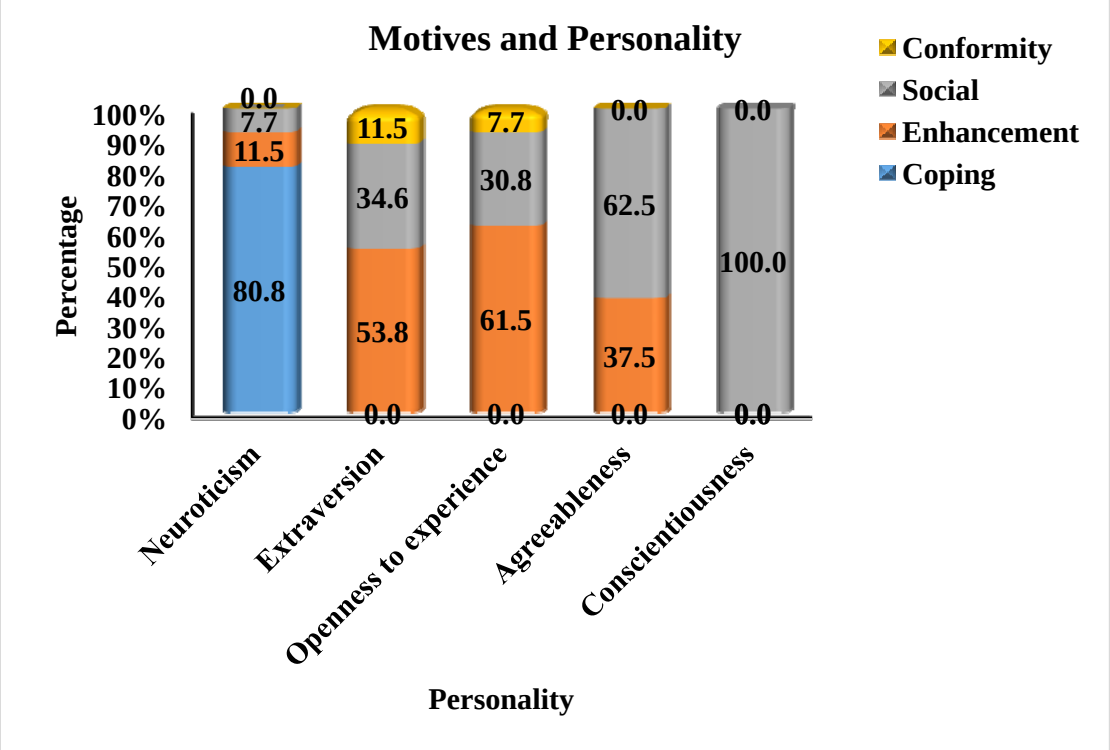


Table 17 and figure 18 shows the association between personality traits and drinking motives. Neuroticism is strongly associated with coping motives (80.8%), extraversion is associated with enhancement (53.8), and openness to experience is associated with enhancement (61.5%), agreeableness associated with social motives.

DISCUSSION

The present study was done with three main objectives

1) To assess the socio demographic profile of alcohol dependent individuals.

2) To establish the personality traits in alcohol dependence individuals.

3) To identify the motives for drinking.

4) To establish association between personality traits and drinking motives.

In the socio demographic profile, age at presentation for most of the alcohol dependent individual ranged between 26 to 40 years. The mean age at presentation in the present study was 32.75 years. Several studies with the similar design had mean age at presentation ranged between 35 and 40 years (76). The mean age of first drink in this study was 17.5 years. This is consistent with the study done by powell et al (77) which claims that mean age of drinking was 17.3 years while age at problem level drinking was 30.4 years. However, one study had reported mean age at first consumption to be 15.4 years. Most of the individual had studied up till high school in this study which is concordant with the previous study. (78). which portraits that individual who had left high

school were consistently found to be at increased risk for alcohol use and problem drinking than a individual who had completed degree. In addition, 1 to 8 years of formal education were associated with increased risk for drinking relative to graduates.

Most of the individuals in this study were either unemployed or doing unskilled work. Alcohol dependence was more common in unemployed individuals. Furthermore, there were evidence suggestive of men who were unemployed and seeking work had problem drinking and alcohol related complication. It is notable that unemployed may result in the onset of problem drinking and dependence (79) or vice versa although both domains would be operating simultaneously.

Majority of the individual in the present study belonged to the lower middle and middle socioeconomic status according to modified kuppuswamy scale. This is in consistent with several studies which mention that alcohol dependence are higher in lower socio economic status.(80)

Most of the individual in the present study were either married or were single (unmarried) which is inconsistent with a recent report from NESARC (81) (smith et al) showing most that most women who were married to alcohol dependent individual were more likely to separate from their life partners or end their relationship in the subsequent 2 years.

In addition it has been shown that problem drinking predicted marital dissolution 12 years later in a large probability sample.

Majority of the individuals with alcohol dependence belonged to a nuclear family. The possible reason could be due to stress (emotional and financial) borne by the head of the family, who would more likely to use alcohol as a coping strategy. In the case of joint family, it is equalled shared by the members of joint family. Majority of the individual with alcohol dependence belonged to Hinduism. Majority were from urban area.

In this study there were evidence of family history suggestive of alcohol use disorders in majority of individuals with alcohol dependence which is consistent with the study by heathel et al, which states alcohol dependence are familial in nature and there is evidence for history of alcohol consumption running in families, often found within biological relatives throughout multiple generations.

The present study has shown significant association between FFM personality traits and alcohol dependence. This study is in favour of established positive relationship between global personality traits and alcohol use. In this study Neuroticism, extraversion and openness were significantly associated with alcohol dependence. Agreeableness and conscientiousness were less significantly associated with alcohol

dependence. Ruiz et al, established for individuals who are problem drinkers, scores are significantly higher on neuroticism, extraversion and openness of experience domains and remarkably lower on agreeableness.

This present study confirms the above findings. In this study neuroticism domain is relatively more associated with coping than enhancement domain and openness to experience domain. This is concordant with the study by cooper et al, which states that there is a positive correlation with coping motives and neuroticism. This does not agree with the study done by Little field et al, that claims reduction in impulsivity and neuroticism were associated with decrease in problem drinking from age 18 to 35years.

Previous researches have established that those individuals who score high in neuroticism consume more substance in order to reduce negative feeling state or to increase positive feeling state. This study indicates that neuroticism domain increase with the level of alcohol consumption. Many other studies in research have observed higher scores for heavy drinkers and alcohol dependence, this present study establishes significant association between alcohol dependence and extraversion domain.

The result of this study is concordant with the theory of the FFM in relationship with alcohol dependence and openness of experience.

Steward and devine theorized that high openness to experience domain scores on NEO-PIR would predict increased level of alcohol use. Agreeableness' domain is negatively correlated with both the alcohol dependence and alcohol related problems which is the constitutive pattern among heavy drinkers.

In this study, coping and enhancement motives are more related with alcohol dependence which is consistent with review by Kuntsche et al, which states that enhancement motives are correlated with heavy drinking where as coping motives are correlated with heavy drinking and alcohol related complication. (carpenter hassin)

CONCLUSION

Alcohol dependence is more common in low socio economic status and with individual who had education up to high school. Alcohol related complications can be reduced significantly if the education status is elevated and socio economic standards are improved in developing countries like India where alcohol consumption is considered as a life style choice. Education and socioeconomic status were inversely related to alcohol related problems.

Most of the individuals who attended the de addiction clinic for treatment of alcohol dependence were males which might be due to social barrier, preventing the females from visiting OPD.

Alcohol dependent individuals score higher on neuroticism indicating that these individuals are more emotional, frequently become anxious or depressed, and tend to have more mood swings.

A significant proportion of individuals score higher on extraversion indicating that the individuals are more assertive, sociable and venturesome

Alcohol dependent individuals was found to be inversely correlated which conscientiousness domain.

In this study coping motives is significantly associated with neuroticism and is valued as a strong predictor for problem drinking and alcohol related consequences.

Enhancement motives is significantly associated with extraversion and is valued as a strong predictor for heavy drinking

Enhancement motives are significantly associated with Openness to experience domain and social motives is significantly correlated with agreeableness domain, however secondary drinking motives for all the individuals were tolerance and withdrawal symptoms.

LIMITATIONS

The major limitation in the study was the sample size. Larger sample size would have thrown greater light and understanding on the study of personality traits and would have revealed remarkable association between personality traits and drinking motives

Another major limitation of the study is that sample was selected from patients who sought help in psychiatric hospital, hence the finding may not be generalised to patients with similar problems in the community

Assessment tools requires the past patients ability to recall his events (primary motives) and so there is a probability of recall bias on the part of the patients.

Another disadvantage in this study is the absence of certain aspects of personality (e.g religion) in FFM Model which is considered as important facet of personality in a country like India .

Another disadvantage is many of the participants had difficulty in understanding some of the items in the scale, hence the validity of scale in this group is doubtful.

This study included only males, so the finding of our study may not be applicable to females**.**

FUTURE DIRECTIONS

- Longitudinal studies examining the association between alcohol dependence and socio demographic variables in the future will enhance our insight towards alcohol dependence
- Since this study did not include the environmental factors, their consideration in the future studies will deepen our insight.
- Case – control studies can be done in the future to assess the relationship between personality traits and drinking motives.
- Future studies should assess whether introduction of suitable psycho social intervention would be of therapeutic value in improving the individual with specific personality traits**.**

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SOCIODEMOGRAPHIC DATA SHEET

Sociodemographic profile

Name:

Age:

Sex:1.Male

2.female

Education:

1.profession or honours

2.Graduate or Post graduate

3.intermediate or post high school diploma

4.high school certificate

5.middle school certificate

6.primary school certificate

7.illiterate

Occupation:

1.profession

2.Semi- profession

3.clerical, shop –owner, farmer

4.skilled worker

5.Semi-skilled worker

6.Unskilled worker

7.Unemployed

Income:

1.>32050
2.16020- 32049
3.12020-16019
4.8010-12019
5.4810-8009
6.1601-4809
7.<1600

Marital status:

1.Married
2.Divorcee
3.Single

Socioeconomic status:

1.upper
2.upper middle
3.lower middle
4.upper lower
5.lower

Residence:

1.urban
2.semi urban
3.rural

Type of family:

1.joint
2.nuclear

Religion:

1.hindu

2.christian

3.muslim

4.others

Family history of alcohol:

1. yes

2. No

Age of onset of drinking

Age of presentation in opd

Personality traits

1. neuroticism

2.extraversion

3.openness to experience

4. agreeableness

5.conscientiousness

Drinking motives

1.coping

2.enhancement

3.social

4.conformity

NEO Five-Factor Inventory (NEO-FFI) Form S

1	**I am not a worrier.**
2	I like to have a lot of people around me.
3	**I don't like to waste my time daydreaming.**
4	I try to be courteous to everyone I meet.
5	I keep my belongings neat and clean.
6	I often feel inferior to others.
7	I laugh easily.
8	**Once I find the right way to do something, I stick to it**
9	**I often get into arguments with my family and coworkers**
10	I'm pretty good about pacing myself so as to get things done on time.
11	When I'm under a great deal of stress, sometimes I feel like I'm going to pieces.
12	**I don't consider myself especially "light-hearted."**
13	I am intrigued by the patterns I find in art and nature
14	**Some people think I'm selfish and egotistical.**
15	**I am not a very methodical person.**
16	**I rarely feel lonely or blue.**
17	I really enjoy talking to people.
18	**I believe letting students hear controversial speakers can only confuse and mislead them.**
19	I would rather cooperate with others than compete with them
20	I try to perform all the tasks assigned to me conscientiously
21	I often feel tense and jittery.
22	I like to be where the action is.
23	**Poetry has little or no effect on me.**
24	**I tend to be cynical and skeptical of others' intentions**
25	I have a clear set of goals and work toward them in an orderly fashion
26	Sometimes I feel completely worthless.

27	**I usually prefer to do things alone.**
28	I often try new and foreign foods.
29	**I believe that most people will take advantage of you if u let them**
30	**I waste a lot of time before settling down to work.**
31	**I rarely feel fearful or anxious.**
32	I often feel as if I'm bursting with energy.
33	**I seldom notice the moods or feelings that different environment produce**
34	Most people I know like me.
35	I work hard to accomplish my goals.
36	I often get angry at the way people treat me.
37	I am a cheerful, high-spirited person.
38	**I believe we should look to our religious authorities for decisions on moral issues.**
39	**Some people think of me as cold and calculating.**
40	When I make a commitment, I can always be counted on to follow through.
41	Too often, when things go wrong, I get discouraged and feel like giving up.
42	**I am not a cheerful optimist.**
43	Sometimes when I am reading poetry or looking at a work of art, I feel a wave of excitement.
44	**I'm hard-headed and tough-minded in my attitudes.**
45	**Sometimes I'm not as dependable or reliable as I should be.**
46	**I am seldom sad or depressed.**
47	My life is fast-paced.
48	**I have little interest in speculating on the nature of the universe or the human condition.**
49	I generally try to be thoughtful and considerate.
50	I am a productive person who always gets the job done
51	I often feel helpless and want someone else to solve my problems.
52	I am a very active person.

53	I have a lot of intellectual curiosity.
54	**If I don't like people, I let them know it.**
55	**I never seem to be able to get organized.**
56	At times I have been so ashamed I just wanted to hide
57	**I would rather go my own way than be a leader of others**
58	I often enjoy playing with theories or abstract ideas
59	If necessary, I am willing to manipulate people to get what I want
60	I strive for excellence in everything I do.

For the non-reversed-scored items, SD=0, D=1, N=2, A=3, SA=4.

For the reversed-scored items, SD=4, D=3, N=2, A=1, SA=0.

N: **1**, 6, 11, **16**, 21, 26, **31**, 36, 41, **46**, 51, 56

E: 2, 7, **12**, 17, 22, **27**, 32, 37, **42**, 47, 52, **57**.

O: **3**, **8**, 13, **18**, **23**, 28, **33**, **38**, 43, **48**, 53, 58.

A: 4, **9**, **14**, 19, **24**, **29**, 34, **39**, **44**, 49, **54**, 59.

C: 5, 10, **15**, 20, 25, **30**, 35, 40, **45**, 50, **55**, 60.

Compared to males in the normative sample:

N: < 13 low :(< 6 very low) >21 high (> 29 very high) Otherwise, average range.

E: < 24 low (< 18 very low) > 30 high (>36 very high) Otherwise, average range.

O: < 23 low (<18 very low) > 30 high (> 36 very high) Otherwise, average range.

A: < 29 low (< 24 very low) >35 high (> 40 very high) Otherwise average range.

C: < 30 low <25 very low) >37 high (> 43 very high)Otherwise average range.

Compared to females in the normative sample:

N: < 16 low :(< 8 very low) >25 high (> 32 very high) Otherwise, average range.

E: < 25 low (< 19 very low) > 31 high (>37 very high) Otherwise, average range.

O: < 23 low (<18 very low) > 30 high (> 36 very high) Otherwise, average range.

A: < 31 low (< 26 very low) >36 high (> 41 very high) Otherwise average range.

C: < 32 low <26 very low) >38 high (> 44 very high)Otherwise average range.

DMQ-R

INSTRUCTIONS: Listed below are 20 reasons people might be inclined to drink alcoholic beverages. Using the five-point scale below, decide how frequently your own drinking is motivated by each of the reasons listed.

	YOU DRINK…	Almost Never / Never	Some of the time	Half of the time	Most of the time	Almost Always / Always
1.	To forget your worries.	1	2	3	4	5
2.	Because your friends pressure you to drink.	1	2	3	4	5
3.	Because it helps you enjoy a party.	1	2	3	4	5
4.	Because it helps you when you feel depressed or nervous.	1	2	3	4	5
5.	To be sociable.	1	2	3	4	5
6.	To cheer up when you are in a bad mood.	1	2	3	4	5
7.	Because you like the feeling.	1	2	3	4	5
8.	So that others won't kid you about *not* drinking	1	2	3	4	5
9.	Because it's exciting.	1	2	3	4	5
10.	To get high.	1	2	3	4	5
11.	Because it makes social gatherings more fun.	1	2	3	4	5

12.	To fit in with a group you like.	1	2	3	4	5
13.	Because it gives you a pleasant feeling.	1	2	3	4	5
14.	Because it improves parties and celebrations.	1	2	3	4	5
15.	Because you feel more self-confident and sure of yourself.	1	2	3	4	5
16.	To celebrate a special occasion with friends.	1	2	3	4	5
17.	To forget about your problems.	1	2	3	4	5
18.	Because it’s fun.	1	2	3	4	5
19.	To be liked.	1	2	3	4	5
20.	So you won’t feel left out.	1	2	3	4	5

Drinking Motives Questionnaire-Revised (DMQR)

Drinking Motives Questionnaire-Revised (DMQR)

The Drinking Motives Questionnaire-Revised (DMQR) contains 20 reasons why people might be motivated to drink alcoholic beverages. Participants rate on a 5-point scale how frequently each of the 20 listed reasons motivate them to drink alcoholic beverages. The measure yields four scale scores reflecting different motives for drinking alcohol.

Item Coding

The DMQR consists of 20 items that are rated on a 5-point Likert scale as follows:

Almost Never/Never	Some of the time	Half of the time	Most of the time	Almost Always/Always
1	2	3	4	5

Scales

The DMQR yields four primary scales. Description of the scales and item loadings are listed below. Scale scores are calculated as the sum of respective items. No items are reverse scored.

Scale Name (Abbr.)	Description	Item loadings
Social (SOC)	This scale has items reflecting social motives for alcohol use.	3, 5, 11, 14, 16
Coping (COP)	This scale has items reflecting coping motives for alcohol use.	1, 4, 6, 15, 17
Enhancement (ENH)	This scale has items reflecting enhancement motives for alcohol use.	7, 9, 10, 13, 18
Conformity (CON)	This scale has items pertaining to external social pressures that push an individual to conform and engage in alcohol use.	2, 8, 12, 19, 20

s.no	age	marital	religion	education	occupaion	income/area	ses	first drink	family type	family hlo	personality	motives
1	40	2	1	3	6	6/u	4	20	1	1	4	2
2	40	2	2	2	5	4/u	4	19	2	2	3	2
3	40	2	1	3	5	4/u	3	19	1	2	1	1
4	29	3	1	4	6	5/u	4	18	1	2	2	2
5	35	1	2	4	5	4/r	4	15	2	2	2	3
6	37	1	1	3	9	4lu	4	22	2	1	2	2
7	26	3	2	4	9	4/r	4	17	1	2	1	2
8	28	2	1	3	9	5/u	4	19	2	1	1	1
9	32	1	1	3	4	5/u	4	19	1	2	2	3
10	40	1	1	3	6	4/r	3	18	1	1	1	1
11	36	2	1	2	10	5/u	5	25	2	1	1	1
12	40	1	1	3	6	3/u	3	19	1	1	1	1
13	31	3	2	3	8	4/u	4	19	1	1	1	1
14	35	2	1	1	2	3/u	4	15	2	1	2	2
15	27	3	1	4	9	4/u	4	17	1	1	2	2
16	40	1	1	2	9	5/r	4	16	2	1	1	1
17	40	2	1	2	9	5/u	4	16	2	2	1	1
18	30	1	1	4	9	5/u	4	12	2	1	2	2
19	22	3	2	2	6	5/u	3	15	1	1	1	1
20	40	2	1	3	6	5/r	4	18	2	1	1	1
21	20	3	1	2	10	na/u	4	17	1	1	4	3
22	30	3	1	3	6	5/r	4	18	1	1	1	1
23	19	3	1	3	6	5/u	4	13	1	2	3	2
24	39	1	1	3	6	4/r	3	18	1	1	1	1
25	36	2	1	2	10	7/u	5	25	2	1	1	1
26	40	1	1	3	6	5/u	3	19	1	1	1	1
27	31	3	2	3	8	4/u	4	19	1	1	1	1
28	35	2	1	1	2	5/u	4	15	2	1	2	2
29	27	3	1	4	9	4/r	4	17	1	1	2	2
30	40	1	1	4	9	5/u	4	16	2	1	1	1
31	40	2	1	4	9	5/u	4	16	2	2	1	1
32	30	1	1	4	9	5/u	4	12	2	1	2	2

33	22	3	2	2	6	5/u	3	15	1	1	1	1
34	40	2	1	3	6	5/u	4	18	2	1	1	1
35	20	3	1	2	10	na/u	4	17	1	1	4	3
36	30	3	1	3	6	5/r	4	18	1	1	1	1
37	19	3	1	3	6	5/r	4	13	1	2	3	2
38	39	2	1	3	6	6/u	4	20	1	1	4	2
39	40	2	2	3	5	5/u	4	19	2	2	3	2
40	40	2	1	3	5	4/u	3	19	1	2	1	1
41	29	3	1	4	6	5/u	4	18	1	2	2	2
42	35	1	2	4	5	5/u	4	15	2	2	2	3
43	37	1	1	3	9	4/u	4	22	2	1	2	2
44	26	3	2	4	9	4/r	4	17	1	2	1	2
45	28	2	1	3	9	5/u	4	19	2	1	1	1
46	32	1	1	3	4	5/u	4	19	1	2	2	3
47	40	1	1	3	6	4/u	3	18	1	1	1	1
48	29	1	1	3	9	5/r	4	17	1	1	1	1
49	36	2	1	3	9	5/r	4	16	2	1	2	2
50	30	3	1	3	5	4/u	4	15	2	1	3	2
51	32	1	1	4	5	4/u	4	17	2	1	1	1
52	25	3	1	2	6	5/r	3	19	1	2	1	2
53	37	1	2	3	5	5/u	4	16	1	1	1	1
54	37	1	1	3	4	5/r	4	20	1	1	2	3
55	40	2	2	4	9	5/r	4	18	1	1	3	3
56	32	3	2	4	9	5/u	3	19	1	2	1	3
57	30	3	1	3	6	5/u	3	15	2	1	3	2
58	32	1	1	4	6	5/u	4	17	2	1	1	1
59	25	3	1	3	5	5/u	4	19	1	2	1	2
60	37	1	2	3	4	5/u	4	16	1	1	1	1
61	37	1	1	4	2	4/u	3	20	1	1	2	3
62	40	2	2	3	6	5/u	3	18	1	1	3	3
63	32	3	2	2	8	4/u	4	19	1	2	1	3
64	30	3	1	3	4	5/r	4	15	2	1	3	2
65	32	1	1	3	5	4/u	3	17	2	1	1	1
66	25	3	1	4	9	5/u	3	19	1	2	1	2

67	37	1	2	4	9	5/u	5	16	1	1	1	1
68	37	1	1	3	9	5/u	4	20	1	1	2	3
69	40	2	2	2	9	5/u	3	18	1	1	3	3
70	32	3	2	3	6	5/u	4	19	1	2	1	3
71	39	2	1	3	6	6/r	4	20	1	1	4	2
72	40	2	2	3	5	5/r	4	19	2	2	3	2
73	40	2	1	3	5	5/u	4	19	1	2	1	1
74	29	3	1	4	6	5/u	4	18	1	2	2	2
75	35	1	2	4	9	4/u	4	15	2	2	2	3
76	37	1	1	3	9	5/r	4	22	2	1	2	2
77	26	3	2	4	9	5/u	4	17	1	2	1	2
78	28	2	1	3	9	5/u	4	19	2	1	1	1
79	32	1	1	3	4	5/u	4	19	1	2	2	3
80	40	1	1	3	6	4/r	3	18	1	1	1	1
81	36	2	1	2	10	5/u	5	25	2	1	1	1
82	40	1	1	3	6	3/u	3	19	1	1	1	1
83	31	3	2	3	8	4/u	4	19	1	1	1	1
84	35	2	1	3	2	5/u	4	15	2	1	2	2
85	27	3	1	4	9	5/u	4	17	1	1	2	2
86	40	2	1	3	9	5/u	4	16	2	2	1	1
87	30	1	1	3	9	5/u	4	12	2	1	2	2
88	40	1	1	3	9	5/r	4	16	2	1	1	1
89	22	3	2	2	6	5/r	3	15	1	1	1	1
90	40	2	1	3	6	5/u	4	18	2	1	1	1
91	20	3	1	2	10	na/u	4	17	1	1	4	3
92	30	3	1	3	6	5/r	4	18	1	1	1	1
93	19	3	1	3	6	5/u	4	13	1	2	3	2
94	23	3	1	3	9	5/u	4	16	1	1	1	3
95	33	1	1	3	9	5/u	4	17	1	1	1	1
96	29	2	2	3	9	5/u	5	18	2	2	3	3
97	24	2	2	3	9	5/u	4	16	2	1	2	2
98	34	2	3	3	9	5/u	4	17	2	2	4	3
99	30	1	1	3	9	5/u	3	15	1	2	5	3
100	30	4	2	3	9	5/u	4	15	1	1	4	3

INFORMED CONSENT FORM

Title of the study : "STUDY OF PERSONALITY TRAITS AND ITS ASSOCIATION WITH DRINKING MOTIVES IN ALCOHOL DEPENDENCE"

Name of the Participant : _____

Name of the

Principal/ Co-Investigator : Dr. Hemapriya M.G.

Name of the Institution : INSTUTE OF MENTAL HEALTHE, MADRAS MEDICAL COLLEGE, CHENNAI.

I, _____, have read the information in this form (or it has been read to me). I was free to ask any question and they have been answered. I am over 18 years of age and, exercising my free power of choice, hereby give my consent to be included as a participant in the study titled "STUDY OF PERSONALITY TRAITS AND ITS ASSOCIATION WITH DRINKING MOTIVES IN ALCOHOL DEPENDENCE".

(1) I have read and understood this consent form and the information provided to me.

(2) I have had the consent explained to me.

(3) I have been explained about the nature of the study.

(4) I have been explained about my rights and responsibilities by the investigator.

(5) I have informed the investigator of all the treatments I am taking or have taken in the past months/years including any native (alternative) treatments.

(6) I have been advised about the risks associated with my participation in the study.

(7) I have not participated in any research study within the past _____ month(s).

(8) I am also aware of the fact that I can opt out of the study at any time without having to give any reason and this will not affect my future treatment in the hospital.

(9) I am also aware that the investigators may terminate my participation in the study at any time, for any reason, without my consent.

(10) I hereby give permission to the investigators to release the information obtained from me as result of participation in the study to sponsors, regularly authorities,

Government agencies, and ethics committee. I understand that they may inspect my original records.

(11) I understand that my identity will be kept confidential if my data are publicly presented.

(12) I have had my questions answered to my satisfaction.

(13) I consent voluntarily to participate as a participant in the research study.

I am aware, that if I have any question during this study, I should contact the investigators. By signing this consent form, I attest that the information given in this document has been clearly explained to me and understood by me. I will be given as copy of this consent document.

For adult participants

Name and signature/ thumb impression of the participant (or legal representative if participant incompetent):

(Name)_____(Signature)_____Date:_____

Name and signature of impartial witness (required for illiterate patients):

(Name)_____(Signature)_____Date:_____

Address and contact number of the impartial witness:_____

_____

Name and signature of the Investigator or his representative obtaining consent:

(Name)_____(Signature)_____Date:_____

INFORMATION TO PARTICIPANTS

Title: "Study of personality traits and its association with drinking motives in alcohol dependence"

Principal Investigator: Dr. Hemapriya.M.G

Name of Participant:

Site:

You are invited to take part in this research/ study/procedures/tests. The information in this document is meant to help you decide whether or not to take part. Please feel free to ask if you have any queries or concerns.

What is the purpose of research?

By establishing the association between drinking motives and personality traits, we can modify the treatment strategies and hence can prevent relapse. We are also assessing the sociodemographic profile of alcohol dependence patients.

We have obtained permission from the Institutional Ethics Committee.

The study design

Descriptive study

Study Procedures

The study involves evaluation of personality traits and its association with drinking motives in alcohol dependence individuals aged 18-40 years drawn from OP/IP patients from institute of mental health. The individuals are evaluated by giving NEO-PIR and drinking motives revised scales. You will be required to allot 30 minutes for evaluation.

Possible risks to you – If any, Briefly mention

There is no possible risks to you in this study.

Possible benefits to you - If any, Briefly mention

New strategies can be made to prevent relapse which could be a possible benefit to you and your family.

Possible benefits to other people

The results of the research may provide benefits to the society in terms of advancement of medical knowledge and/or therapeutic benefit to future patients.

Confidentiality of the information obtained from you

You have the right to confidentiality regarding the privacy of your medical information (personal details, results of physical examinations, investigations, and your medical history). By signing this document, you will be allowing the research team investigators, other study personnel, sponsors, Institutional Ethics Committee and any person or agency required by law like the Drug Controller General of India to view your data, if required.

The information from this study, if published in scientific journals or presented at scientific meetings, will not reveal your identity.

How will your decision to not participate in the study affect you?

Your decision not to participate in this research study will not affect your medical care or your relationship with the investigator or the institution. You will be taken care of and you will not loose any benefits to which you are entitled.

Can you decide to stop participating in the study once you start?

The participation in this research is purely voluntary and you have the right to withdraw from this study at any time during the course of the study without giving any reasons. However, it is advisable that you talk to the research team prior to stopping the treatment/discontinuing of procedures etc.

Signature of Investigator

Date

Signature of Participant

Date :

Signature of the Guardian