Life has become a burden on many of us nowadays, which is why we get to see a havoc picture around. There is a reservoir of stressors, which has and is drowning much of our fellow human beings. As some of the human beings are more vulnerable and want to drift away these stressors in a convenient way, fall prey to these perceived easy stress busters “Drugs”. But unfortunately the condition they are in later is like a person who is drowning in and coming up the surface in this life’s ocean. People have lost the sense of direction in life, ignoring what they actually want, but blindly follow where others and the life is taking them towards, hence end up missing up their lives.

Drug abuse has become a matter of major concern for us today. The term abuse and addiction has been defined and redefined over the years. The 1957 World-Health Organization (WHO) expert committee on addiction producing drugs addiction and habituation as component of abuse:

Drug addiction is a state of periodic or chronic intoxication produced by the repeated consumption of a drug (natural or synthetic). Its characteristics include:

i) An overpowering desire or need (compulsion) to continue taking the drug and to obtain it by any means.

ii) A tendency to increase the dose.

iii) A psychic (psychological) and generally a physical dependence on the effects of the drugs.

iv) Detrimental effect on the individual and on society.

Drug habituation (habit) is a condition resulting from the repeated consumption of a drug. Its characteristics include:

i) A desire (but not a compulsion) to continue taking the drug for the sense of improved well-being which it engenders.

ii) Little or no tendency to increase the dose.

iii) Some degree of psychic dependence on the effects of the drug, but absence of physical dependence and hence of an abstinence syndrome (withdrawal).

iv) Detrimental effects, if any primarily on the individual.
In 1964, a new WHO Committee found these definitions to be inadequate and suggested using the blanket term “drug dependence”, but committee did not clearly define dependence.

In 2001, the American Academy of pain medicine, the American pain society and the American society of addiction medicine jointly issued “definitions related to the use of opioids for the treatment of pain”, which defined the following terms:

Addiction is a primary, chronic, neurobiologic disease, with genetic, psychosocial and environmental factors influencing its development and manifestations. It’s characterized by behaviours that include one or more of the following: impaired control over drug use, compulsive use, continued use despite harm, and craving.

It should be noted that the Diagnostic Statistical Manual (DSM IV) (2006) spells out specific criteria for defining abuse and dependence. DSM IV uses the term substance dependence instead of addiction; a maladaptive pattern of substances abuse, leading to clinically significant impairment or distress, as manifested by three (or more) specified criteria, occurring at any time in the 12 months period.

Drugs known to cause addiction include illegal drugs as well as prescription or over the counter drugs.

1.1 CAUSES AND THEORIES OF DRUG ADDICTION

Many factors influence a person’s initial drug use: Individual factors, psychosocial factors, biological factors etc. These factors are less important as drug use continues and the person repeatedly experiences the potent pharmacological effects of the drugs. Therefore, now we will try to understand the underlying and associated causes of drug addition by reviewing there theoretical viewpoints.
<table>
<thead>
<tr>
<th>Classification</th>
<th>Drug</th>
<th>Effect</th>
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<tbody>
<tr>
<td>Sedative</td>
<td>Alcohol (ethanol) Barbiturates</td>
<td>Reduce tension</td>
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<tr>
<td></td>
<td>Nembutal (pento barbital)</td>
<td>Facilitate social interaction</td>
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<tr>
<td></td>
<td>Seconal (secobarbital) Veronal (barbital)</td>
<td>Blot out feelings or events</td>
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<td></td>
<td>Tuinal (secobarbital and amobarbital)</td>
<td>Reduce tension</td>
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<tr>
<td>Stimulants</td>
<td>Amphetamines</td>
<td>Increase feelings of alertness and confidence</td>
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<td></td>
<td>Benzedrine (amphetamine)</td>
<td>Decrease feelings or fatigue</td>
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<tr>
<td></td>
<td>Dexedrine (dextoamphetamines)</td>
<td>Stay awake for long</td>
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<td></td>
<td>Methedrine (metha-amphetamines)</td>
<td>Decrease feeling of fatigue</td>
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<td></td>
<td>Cocaine (coca)</td>
<td>Increase endurance</td>
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<td></td>
<td></td>
<td>Stimulate sex drive</td>
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<tr>
<td>Narcotics</td>
<td>Opium and its derivatives</td>
<td>Alleviate physical pain</td>
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<td></td>
<td>Opium</td>
<td>Induce relaxation and pleasant revive</td>
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<td></td>
<td>Morphine</td>
<td>Alleviate anxiety and tension</td>
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<td></td>
<td>Codeine</td>
<td>Treatment of Heroin</td>
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<td></td>
<td>Heroine</td>
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<td></td>
<td>Methadone (synthetic narcotic)</td>
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<tr>
<td>Psychedelics and Hallucinogens</td>
<td>Cannabis</td>
<td>Induce changes in mood, thought, and behaviour</td>
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<tr>
<td></td>
<td>Marijuana</td>
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<tr>
<td></td>
<td>Hashish</td>
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<td></td>
<td>Mescaline (peyote)</td>
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<td></td>
<td>Psilocybin (psychotogenic much room)</td>
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<tr>
<td>Anti-anxiety drugs (minor tranquilized)</td>
<td>LSD (lysergenic acid diethylamide-25) PDC (phencyclidine)</td>
<td>“Expand” one’s mind induce stupor</td>
</tr>
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<td></td>
<td>Librium (chlordane poxide)</td>
<td>Alleviate tension and anxiety induce</td>
</tr>
<tr>
<td></td>
<td>Miltown (meprobamate) Valium (diazepam) Xanax</td>
<td>relaxation and sleep</td>
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(a) Psycho Analytic/ Dynamic Theory

Sigmund Freud took great interest in addictions. In 1897 he wrote to a friend that “masturbation is one great habit that is a primary addiction and that the other addictions for alcohol, morphine, tobacco, etc. only enter into life as a substitute and replacement of it” (Frosch, 1985, p.28). Thus it appears that to Freud, both smoking and drinking were related to oral eroticism (Frosch, 1985; Royce and Scratchley, 1996). At other point in his life, Freud postulated that alcoholism was a slow form of suicide which sprang from the death instinct or that latent homosexuality could be a causal contributor to the misuse of alcohol (Haynes, 1988; Royce and Scratchley, 1996). Freud’s primary theories regarding the etiology of alcoholism - slow suicide, oral fixation and latent homosexuality, Royce and Scratchley (1996) conclude that of those three Freudian theories, the first may have some slight foundation, the second does not explain why the oral gratification must be from alcohol and not any other and the homosexual theory was pretty well refuted when some state laws were changed to allow women to drink in bars and the alcoholics went right on drinking without paying any attention to the sex of whoever was on the next barstools.

Later analytic viewpoint added elements to the traditional Freudian viewpoint that oral gratification was a prime component in the etiology of addiction. In the late 1920’s Glover asserted that in addiction attributed to a fixation at oral and anal sadistic stages, alcoholics exhibited a propensity to regress to a “narcissistic state of ego organization which sets into action a primitive ego mechanism of projection “as well as” a disordered and severe primitive conscience leading to fruitless exploitation of the same mechanism of projection” (Frosch, 1985, p.30).

(b) Disease Model/ Theory

The ‘disease model’ or ‘medical model’ has been accepted and adopted by the American Medical Association, the World Health Organization and the National Council on Alcoholism (McKim, 1997). In this model, as defined in the International Classification of Disease (ICD-10), addiction is a physical disease, like all other diseases, is characterized by signs and symptoms as well as by its progressive nature. It is destructive in nature if not attended to and it is assumed that the only means of eradicating the disease is to target the toxic agent. In the case of addiction, the
substance of abuse is to be avoided. However, one problem with viewing addiction as a disease, is that it is not clear as to how the disease begins.

(c) Physical-Dependence Theory/ Biological Perspective

Among the more biologically based theories, the ‘physical-dependence theory’ of addiction (i.e. withdrawal relief paradigm or opiate addiction model) is more specific to opiate dependence. Since chronic use of opiate causes pathological changes in autonomic functioning, producing effects such as withdrawal and tolerance, this model regards compulsive drug taking as the behavioural manifestation of a desperate need to relieve aversive withdrawal symptoms (Lyvers, 1998). In effect, this model regards the behavioural manifestation of drug addiction to take place once the physical dependence has been established. The user becomes an addict and regards himself as such, once he makes a cognitive connection between administration of the opioid and relief of withdrawal distress. This model purports that the behavioural addiction will cease once the extinction of drug related conditioned response is accomplished. This can be done through temporary relief measures such as administering the narcotics antagonist naltrexone, which blocks the opioid receptors and subsequently the effects of opioids.

Researchers have conducted numerous investigations using animal models and functional brain imaging on humans in order to define the mechanisms underlying drug addiction in the brain. This incorporates several areas of the brain and synaptic changes or neuroplasticity, which occurs in these areas.

Acute effects

Acute (or recreational) drug use causes the release and prolonged action of dopamine and serotonin within the reward circuit. Different types of drugs produce these neurotransmitters by different methods. Dopamine binds to the D1 receptor, triggering a signaling cascade within the cell. CAMP-dependent Protein Kinase (PKA) phosphorylates CAMP response element binding protein (CREB) a transcription factor, which induces the synthesis of certain genes including CFOS (Kolivas and Volkow, 2005).
Reward Circuit: (Reinforcement Model)

Addictive drugs are positive reinforcers, so its essential to understand the reward circuit, or the pathways in which drugs act and how drugs can alter those pathways. The reward circuit, also referred to as the mesolimbic system, is characterized by the interaction of several areas of brain.

- The Ventral Tegmental area (VTA) consists of dopaminergic neurons which respond to glutamate. These cells respond when stimuli indicative of a reward are present. The VTA supports learning and sensitization development and releases dopamine (DA) into the forebrain (Jones and Bonci, 2005). These neurons also project and release DA into the nucleus accumbens (Eisch and Horburg, 2006), through the mesolimbic pathway. Virtually all drugs causing drug addiction increase the dopamine release in the mesolimbic pathway (Rang, H.P., 2003) in addiction to their specific effects.

- The nucleus accumbens (NACC) consists mainly of medium-spiny projection neurons (MSNs), which are GABA neurons (Kourrich et al., 2007). NACC is associated with acquiring and eliciting conditioned behaviours and involved in the increased sensitivity to drugs as addiction progresses (Jones and Bonci, 2005).

- The prefrontal cortex, more specifically the anterior cingulated and orbitofrontal cortex (Kalivas and Volkow, 2005) is important for the integration of information which contributes to whether behaviour will be elicited. It appears to be the area in which motivation originates and the salience of stimuli are determined (Floresco and Ghods Sharifi, 2007).

- The basolateral amygdala projects into the NACC and is thought to be impotent for motivation as well (Floresco and Ghods, Sharifi, 2007).

- More evidence is pointing towards the role of the hippocampus in drug addiction because of its importance in learning and memory. Much of this evidence stems from investigations manipulating cells in the hippocampus alter dopamine levels in NACC and firing rates of VTA dopaminergic cells (Eisch and Harburg, 2006).
**Stress Response**

In addition to the reword circuit, it is hypothesized that stress mechanism also play a role in addiction. Koob and Kreek have hypothesized that during drug use corticotrophin releasing factors (CRF) activate the hypothalamic pituitary-adrenal axis (HPA) and other stress system in the extended amygdala. This activation influences the deregulated emotional state associated with drug addiction. It also appears that µ-opioid receptor system, which enkephalin acts on, is influential in the reward system and can regulate the expression of stress hormones (Koob and Kreek, 2007).

**Behaviour**

Understanding how learning and behaviour work in the reward circuit can help understand the action of addictive drugs. Drug addiction is characterized by strong drug seeking behaviours in which the addict persistently craves and seeks out drugs, despite the knowledge of harmful consequences (Kalivas and Volkow, 2005; Koob and Kreek, 2007) Addictive drugs produce a reward, which is the euphoric feeling resulting from sustained DA concentrating in the synaptic cleft of neurons in the brain. Operant conditioning is exhibited in drug addicts as well as laboratory mice, cats and primates; they are able to associate an action or behaviour, in this case seeking out the drug, with a reward, which is the effect of the drug (Jones and Bonci, 2005). Evidence shows that this behaviour is most likely a result of the synaptic changes which have occurred due to repeated drug exposure. (Kalivas and Volkow, 2005; Koob and Kreek, 2007; Jones and Bonci, 2005).

**Family History/ Genetic Predispositions**

Studies that have investigated generational differences in the transmission of drug abuse revealed that drug abuse is elevated among siblings of drug abusers and that there is a direct relationship between parental drug use or abuse and offspring’s use or abuse (Merikangas et al.1992). It was also investigated by Merikangas (1990); and Pukins (1991) that high occurrence of alcoholism among offspring of parents with alcoholism demonstrates that family history is one of the most potent predictors of vulnerability to alcohol abuse, which results to some extent from genetic factors. Further on high rate of alcohol and opioid dependence has been evidenced in the 1st degree relatives of opioid dependent patients. (Prasant et al., 2006).
It is also witnessed that the knowledge of father’s alcohol use and its time of onset may be used to determine children who are at added risk of problematic alcohol use later in life, (Selijamo et al., 2006) indicating familial and genetic influence on addition. Therefore its seen parenting and familial influence on substance use and substance use disorder are important areas of study both for theories of etiology and for the development of preventive and treatment interventions (Chassin et al., 2006).

A growing literature suggests individual differences in vulnerability to develop substance related problems are influenced to a large degree by genetic factors (Prescott et al., 2006). Family, twin and adoption studies provide strong evidence that addiction runs in families and that this is determined in part by genetic factors (David, B., 2008).

** Behaviourist : Learning Theories **

Other approach to the etiology of addiction was studied by the behaviourists, they explained addiction from the framework using classical and operant conditioning paradigm. Once learned, the behaviour is maintained by reinforcing contingencies (Shaffer and Schneider, 1985). Wilker hypothesized a two stage approach to addiction, utilizing these paradigms for Wilker, the acquisition of an addiction can be explained in terms of the classical conditioning model. This occurs with the addict’s pairing of conditioned stimuli such as thoughts or emotions with an unconditioned stimulus, such as a narcotic. The rush euphoria experienced by the addict with the ingestion of narcotics then serves as an unconditioned response. Wilker believed that operant conditioning is responsible for the maintenance of an addiction, asserting that the narcotic’s ‘fix’ averts the unpleasant side effects of the withdrawal. In operant terms, the cessation of the unpleasant effects of withdrawal constitute negative reinforcement (Shaffer and Schneider, 1985; Wilker, 1965). Shaffer and Schneider (1985) contended that the use of Antabuse and Naltrexone as clinical interventions are based in part on Wilker’s two stage model. They state that Naltrexone, which is a narcotic agonist, suppressor the link between conditioned stimuli and conditioned responses. Further, Antabuse acts as an aversion consequences replacing previous consequences that were positively reinforcing. Benjamin Rush experimented with aversion therapy in the 1780’s. In the early part of the 19th century, a physician known
as Dr. Kain “used a tartar emetic as an aversive agent to link the taste and smell of alcohol to nausea” (White, 1998, p.105).

Traditionally, much of behavioural treatment in general, and of addictions specifically is based on the principles of reinforcement: that positive reinforcement, negative reinforcement and punishment serve as powerful behavioural motivators (Atkinson, Atkinson and Hilgoid, 1983). Radical behaviourism holds that internal cognitive events are inappropriate targets for behavioural assessment and intervention (Atkinson, Atkinson and Hilgoid, 1983; Shaffer and Schneider, 1985). However most practitioners today who are using behavioural approaches to treat addictions take a less restrictive approach. Shaffer and Schneider (1985) describe what they call the “neo classical” approach to behavioural therapy for addictive behaviour as worked by “the centrality ascribed to various internal constructs of dysphoria”. They cite the negative consequences of withdrawal including such unobservable internal states as anxiety, panic and addictive cravings, e.g. as being constructs which are fundamental to such technique as systematic desensitization, reciprocal inhibition and flooding.

(e) **Social Learning Theory**

Social learning theory assumes that not all behaviour can be attributed solely to external reinforcers. Rather, behaviour can also be learned through the observation of others (Crooks and Stein, 1991). Social learning theory as it applies to etiology and treatment of addiction assumes that, like prosocial behaviour, deviant behaviour patterns are acquired and maintained on the basis of three regulatory systems:

First, social learning theorist assume that some behaviour patterns are under the control of external stimulus events and are effected largely by the classical conditioning model. Secondly, reinforcement process – the main focus of operant conditioning is considered as another major form of behaviour control. Third, and perhaps the most important system of regulatory influence for the social learning school, is the role of cognitive mediational processes (Shaffer and Schneider, 1985, p.46).

Unlike traditional models of classical and operant conditioning, the social learning perspective considers people to be actively involved in the learning process. Rather than passively responding to environmental contingencies, human beings
actively participate in determining their reinforcers and interpreting the relevance of those reinforcers (Crooks and Stein, 1991; Shaffer and Schneider, 1985). Thus, it is our active interpretation of our environment and of events, which determines their status as subjective reinforcers and which in turn impels us to respond in a particular manner.

Modeling is a prime example of the interaction between environment and cognitions as it applies to learned behaviour. One way in which people learn how to behave appropriately in a given social situation is by picking up on subtle or overt behavioural cues. A number of experiments have indicated that the rate of alcohol consumption in college students increases or decreases in response to the drinking behaviour of a confederate (Caudill and Marlatt, 1975; De Ricco, 1977).

Another form of interpersonal influence is, of course, adherence to group norms and values. Peele’s (1988) assertion was that a person’s concept of morality was responsible, in part, for his or her addictive behaviour, and his assertion that an individual’s code of ethics was determined, in fact, by identification with a particular group. Peele believed that this might help explain the comparatively low rates of alcohol for persons of particular religion denominations, such as orthodox Jews and practicing Mormons.

Also a person’s desired identification with his ideal person could serve as a powerful influence in the etiology or maintenance of addictive behaviour. For years, books, movies and television threat upon the public the image of a ‘real man’. The ‘tough guy’ image was a hard drinker, hard smoker, hard bodied and rough in demeanor and style. As early as 1959, Brunn concluded that heavy drinking (though not drunkenness) was seen as a masculine virtue (Mc Corty, 1985).

Again it has been seen that sociocultural factors that have an impact on drug use or abuse include community drug use pattern (Robins, 1984) and neighbourhood disorganization (Sampson, 1985). Growing up and living in a community with high rates of crime, ready availability of drugs, association with delinquent peers and acceptance of drug use and abuse are all associated with drug abuse (Clayton and Voss, 1981; Elliott et al., 1985; Brook et al., 1988; Cohen et al., 1990; Robin and Mc Envoy, 1990). The larger sociocultural environment also has important effects on drug use. The frequency and nature of representation of alcohol, tobacco and illicit
drugs in media (including advertising and modeling by those in the sports and entertainment industries) may have important effects on the normative climate. In addition social and legal policies (taxes, restrictions on conditions of purchase and use, legal status, enforcement) may have important effects on use or abuse.

Ethnographic studies have explored various risk factors for drug use and abuse, as well as the impact of drug abuse on the community. Among Mexican Americans, it has been noted that several risk factors, such as low socio economic status, higher school drop out rates and residing in barrios in large cities exacerbates drug use (Padilla et al., 1979; Carter and Wilson, 1991). Reattachment from conventional norms is expressed in unconventional role like adult role of marriage and employment. It’s not surprising that in some African American population, drug abuse continues into adulthood since conventional adult roles are not assumed (Brunswick et al., 1992). Also, delinquency and crime are strongly linked to drug use and there is increasing involvement of reservation youth in gangs.

1.2 THE ROLE OF PEER PRESSURE IN DRUG ADDICTION

The peer environment also makes a substantial contribution to variation in drug use and abuse (Barnes and Walte, 1986; Oetting and Beauvais, 1987a, b, 1990; Oetting and Lynch, in press). Among older adolescents, peer have a greater effect than parents on drug use and abuse among several groups including whites, African Americans, Asians and Hispanics (Newcomb and Bentler, 1986). Typically, adolescent drug use takes place within the context of peer cluster that consists of best friends or very close friends (Oetting and Beauvais, 1987 a,b) drug use among friends, deviance and time spent with drug using peer are also associated with moderate alcohol and marijuana use (Kandel et al., 1978, Brook et al., 1992). Peer influence on drug use and abuse may occur in a mutually reinforcing pattern based on the tendency or drug using adolescents to select similar peers (Kandel, 1985). Further, the contributing effects of peer influence are likely to be different at different stages of development (Glantz and Pickens, 1992).
1.3 THE ROLE OF FAMILIAL FACTORS IN DRUG ADDICTION

A number of family factors may be associated with the development of drug use and abuse. As reviewed in Glantz and Pickens (1992), they may include poor quality of the child-parent relationship, family disruptions (eg. Divorce, acute or chronic stress), poor parenting, parent and/ or sibling drug use, parental attitudes sympathetic to drug use and social deprivation.

Parents may confer increased risk of drug abuse in their offspring not only through their genes but also by providing negative role models and especially by using and abusing drugs as a coping mechanism. Through social learning, children and adolescents internalize the values and expectations of their parents and possibly acquire their maladaptive coping techniques. This has been found to be the case with adolescents cigarettes smoking (Isralowitz, 1991) and initiation of marijuana use among adolescent (Bailey and Hubber, 1990).

Further parental attitude towards use and abuse also play a role (Barnes and Welte, 1986; Brook et al., 1986 b). African American drug abuse and polydrug abuse may be viewed in part, as contingency enforcement for the deprivation of stable family and interpersonal relationships (Brunswick et al., 1992). Among young native American many of whom are physical isolated on reservations, the primary risk factor for alcohol and illicit drug use are socialization links, family problems and family dysfunction (Swain et al., 1989).

1.4 THE ROLE OF PERSONALITY IN DRUG ADDICTION

One comprehensive way of examining addiction disorder is from a holistic framework. As examined above the view points, which incorporate bio-chemical, environmental adaptive, and psycho-social environment, acknowledges that addiction can never be traced to a single, causal factor. Rather, addictive behavior is understood as having multiple influences.

One important element in understanding addiction from a holistic viewpoint is the concept of individual differences. Why do some people become addicted, when others who share similar predispositions or environment do not? A first step is to look at personal factors that might influence phenotype expression of genetic
predispositions. In others words, what, if any, personality characteristic might be correlated with addictive behavior?

Another important question should be reflected upon here that, Does an “Addictive Personality” exist? The concept of “pre-addictive personality” was largely dismissed in the 1970’s because research was unable to provide supportive evidence. A singular or over arching personality type that renders one prove to addiction has never been established (Conway et al., 2003; Vorheul, 2001). Psychological testing using objective approaches have continually fallen short in identifying a definitive personality profile or psychopathological conditions that is susceptible to addiction (Brust, 1993).

Although certain personality Theorists, sustain that certain people’s personality impact their likeliness of becoming an addict. It is believed that people who like to take risk, and are sensation and stimulus seeking are more likely to abuse drugs, especially Cocaine (Gahlinger, 2004).

Further we can see that certain researchers have exhausted the matter in detail. A great deal of research supports that a number of personality traits do correlate significantly with substance abuse and other form of a addictive behavior (Bau and Salzano, 1995; Kayloe, 1993; Feldman and Eysenck, 1986; Johnson, Tobin and Celluncci, 1992). Cross-Cultural studies bolster the universality of this factor (Bau and Salzano 1995; Doherty and Mathews, 1988; Johnson, Tobin and Cellucci, 1992). It is important to note that research on personality and substance abuse is by its very nature correlational, so no clear cause and effect relationship can be established. There is great deal of evidence to suggest that personality factors interact with a number of biological, psychological, social and environment variables. In addition, there is considerable debate in the scientific community as to whether personality is a casual element in addictive behavior, or whether personality changes are, in fact, attributed to the addiction itself. In a comprehensive analysis of the literature on personality and substance abuse, Cox (1985) attempted to clarify this issue. He separated his findings into three specific domains: personality precursors to substance abuse; personality characteristics of persons who are active substance abusers; and effects of addictive substances on personality.
Cox (1985) discussed there methods used to study personality precursors of substance abuse: archival, archival longitudinal and retrospective. He asserted that, although there are methodological flaws inherent in each of the methods, there is “remarkable consistency in their findings. Studies that included a variety of subjects and testing procedures, pre-alcoholics have consistently been described as nonconforming, independent, under controlled and impulsive individuals (p.213). Jessar and Jessar (1977) found that adolescents who would later become addicted to drugs or alcohol could be differentiated from their non-addicted counterparts by their independence, critical attitude toward society, devaluing of conventional societal institutions, and tolerance for transgression. Other studies have found that adolescents who will become drug abuses are independent, rebellious and devalue academic achievement (Cox, 1985).

The link between personality pathology and substance abuse time and again has involved differing opinions and have created ambiguity about the causal role of psychiatric risk factors, that is personality (Attia, 1988; Kranzler and Tinsley, 2004; Swendsen et al., 2002). It has been seen that, there appears to be greater susceptibility for patients with personality disorder to unintentionally develop chemical abuse and dependence because they often seek substance as a mean of consolation during distressing periods (Castaneda, Galanter and Franco, 1989; Kessler and Price, 1993; Magnavita, 1997). Again stating “personality characteristics may be considered the antecedents, concomitants or consequences of substance abuse” (Cox, 1985).

Substance abuse tends to amplify pre-existing negative personality characteristics and induce a chaotic lifestyle to the extent that drug-seeking behaviors are frequently misconstrued as personality pathology, especially anti-social traits (Cox and Rossool, 2002).

The Moral model provided the notion of a “Character Weakness” that was considered to have a central role in the causation of addiction (Kranzler and Tinsey, 2004). Various theorist have asserted the existence of an “alcoholic personality” that increased the vulnerability to addiction due to traits, such as emotional immaturity, high expectations, praise seeking, reactivity to failure, low frustration tolerance, and insecurity in meeting gender role expectation (Carson et al., 1998).
Practitioners across multiple disciplines have presumed that distinct personality variables foster substance misuse and habituation (Sutker and Allain, 1988). For instance, a model involving stable trait-specific personality variable has been presented in which traits interplay with stress to create the risk of substance abuse (Hides, Lubman and Dawe, 2004).

So, from the above we can see mixed picture given by different researchers. But, a large number of studies have explored personality characteristics of individuals who are active substance abusers (Bau and Salzano, 1995; Cox 1985; Kayloe, 1993; Feldman and Eysenck, 1986; Johnson, Tobin and Cellucci, 1992).

To investigate personality traits of addicts variety of clinical and personality measures have been used such as the MMPI, the Million Clinical Multiaxial Inventory, the Adjective Checklist, the 16-PF, the Eysenck personality questionnaire (Bau and Salzano, 1995; Cox 1985; Kayloe, 1993; Feldman and Eysenck, 1986; Johnson, Tobin and Cellucci, 1992) and for our current study we have used NEO-FFI.

In the early studies it had been found that Anxiety and depression are two of the personality traits most frequently associated with alcoholics (Ciotola and Peterson, 1976; Cox, 1985; Orford, 1975). Also opiate addicts and poly drug abusers were also found to have significant elevated levels of anxiety and depression (Collins, 1985; Cox, 1985; Doherty and Matthews, 1988). Moreover, opiate dependent individuals were found to be higher than controls in the following traits: ego-centrism, impulsivity, aggression, rebelliousness, alienation, hyperactivity, and psychoticism. (Collins, 1979; Cox, 1985; Doherty and Mathews, 1988; Feldman and Eysenck, 1986; Rankin, Stockwell and Hodgson, 1982). Additional studies have described opium addicts as having weak egos, being more field-dependent, lower in extroversion, self esteem, dominance, and scoring higher on the Hypochondriasis, Depression and Hysteria scales of the MMPI (Doherty and Mathew, 1988; Penk, Woodward and Robinowitz, 1980).

Substance abusers also appear to form a heterogeneous group when structured clinical interviews are used to assess personality disorders. Estimates of personality disorder among samples of substance abusers range from 39 percent (Rousar et al., 1994) to 78 percent (De Jang et al., 1993). Further the number of personality disorders among individuals exhibiting dysfunction often exceed one (Morgenstern et al., 1997)
and may be as high as four (De Jang et al., 1993). The full spectrum of personality disorders has been found among substance abusers. De Jung et al. (1993) reported that personality disorders with the exception of antisocial, narcissistic, and schizoid personality disorders were identified in at least ten percent of the participants they sampled.

In another survey of the personality features of individuals with alcoholism or antisocial personality disorder, Sher and Trull (1994) identified three broad personality constructs common to both disorders specifically, they linked the constructs of neuroticism/negative emotionality, extraversion/sociability to the development of both antisocial personality disorder and alcoholism.

Watson, Clark and Harkness (1994) have proposed a hierarchical model of personality structure in which the super ordinate levels are composed of four personality constructs representing a synthesis of the Big Three Models, the Big Five model, and multidimensional models of personality. The super ordinate traits include neuroticism (or negative emotionality), extraversion (or positive emotionality), conscientiousness (or constraint), and agreeableness. Classified with in each of these constructs are numerous component traits to help to clarify the nature of the higher order levels. For example, subsumed within the domain of neuroticism are anxiety, depression, anger, guilt, self consciousness, oversensitivity, self-criticism, negativistic appraisal, and so forth.

There is substantial literature regarding the relationship between personality traits and drug use, particularly in adolescents (Jessor et al. 1973; Jessor and Jessor, 1975; Kamdel, 1980; Hawkins et al., 1985; Brook and Brook 1990; Clayton, 1992).

Studies of the association between adolescents personality characteristics and illicit drug use found that many of the characteristics that signaled the most of drinking predicted drug use. The most powerful predictors of more frequent drug use are the unconventionality variable, including rebelliousness, tolerance of deviance, and low school achievement (Brook et al., 1986).

Persons at high risk for developing alcoholism are significantly more impulsive and aggressive than those at low risk for abusing alcohol (Morey, Skinner and Blashfield, 1984). Greater score on extraversion and sensation seeking characteristic is another dimension of their personalities (Allen et al., 1991).
Reflecting on the characteristics which have been studied high rates of substance (Clark, Watson and Reynolds, 1995), and in a survey of eight alcohol treatment programs Morgenstern, Longenbucker and Colleagues (1997) found that 57.9 percent had a personality disorder, with 22.7 percent meeting criteria for antisocial the personality, temperament, and character dimensions and DSM-W personality disorders in substance abuses and found NEO Neuroticism was associated with many disorders. Further on its also seen that sensation seeking personality characteristics have been found to co-vary with substance use reliably prediction of sexual risk behaviour (Kalichman et al., 1998). Again Ball et al. (1999) conducted another study on factor replicability and validity of the temperament and character inventory in substance dependent patients. The analysis suggested 4 reliable factors that were associated with conceptually related factors that were associated with conceptually related personality dimensions in predicable way. Higher Novelty seeking (or low constraint) and harm avoidance (or low vigor) were associated with several substance use and psychopathology indicators. Conrod et al. (2000) studied the validation of a system of classifying female substance abuses in the basis of personality and motivational risk factors for substance abuse, and found impulsivity was associated with higher rates of antisocial personality disorder and cocaine and alcohol dependence.

Repeatedly investigated personality traits remain integral elements in the formation of substance related disorders (Conway et al., 2003; Verheul, 2001). According to composite models and dimensional approvals on personality characteristics, sensation-seeking, negative emotionality, and a lack of self regulation have the highest correlation with drug abuse and dependence (Chassin, Flora and King, 2004; Sher, Bartholow and Wood, 2000; Trull and Sher, 1994). For example objective and projective measures have shown that opiate addicts tend to be impulsive and aggressive with impaired social relationships (Fieldman, Woolfolk and Allen, 1995) and alcoholics appear to be characterlogically passive, dependent, and anxious (Janowsky et al., 1999).

According to the self medication hypothesis (Khantzian, 1985, 1997; Markou et al., 1998), emotionally unstable individuals may experience that their psychological distress is alleviated when they use opioids. In that respect, using opioids can be seen as a response in a negative reinforcement process (Passer and Smith, 2004; Adams et
It removes an aversive stimulus (psychological distress), reinforcing the response (increased tendency to use opioids).

Opioid use has also been associated with sensation seeking and engagement in risk behavior (Liraud and Verdoux, 2000; Kosten et al., 1994; Scourfield et al., 1996). Zuckerman views sensation seeking as a personality trait with biological foundations making some people more inclined to engage in risk behavior than others (Zuckerman, 2005).

Two studies have examined personality traits in people with opioid dependence. Personality patterns were consistent with those of people with psychiatric and of people with substance use disorders, i.e. high Neuroticism, low conscientiousness and low Agreeableness (Brooner et al., 2002; Carter et al., 2001). Studies of heroin users consistently depict them as high on neuroticism (Martin and Sher, 1994; Trull and Sher, 1994; Piedmont and Ciarrochi, 1999; Fisher et al., 1998). Many studies show an association of heroin use with high Extraversion and high Psychoticism but their association appears to be less robust. (Trull and Sher, 1994, Piedmont and Ciarrochi, 1999; Fisher et al., 1998). Heavy users consistently scored lower than the other group on measures of conscientiousness, impulse control and agreeableness. Abstainers scored lower than moderate and heavy users in Extroversion (Walton and Roberts, 2004). Consistent results were found by (Gabriel, R.E. et al., 2006). On low risk perception and high impulsivity, aggressiveness (Dom, et al., 2006) in substances abusers.

A meta analysis (Bogg and Roberts 2004) examined personality correlates of marijuana use categorizing traits into “negative affect” (e.g., depression, anxiety), “emotionality”, (e.g. extraversion, social disinhibition) and “unconventionality” (e.g., tolerance of deviance, non-religiosity). Results suggested that marijuana use was related to high levels of unconventionality and only weekly to emotionality and negative affect. Across studies, a consistent association was found between marijuana use (as well as other drug use) and low scores on conscientiousness related traits. Cocaine users are characterized by high scores on Neuroticism related traits (Saiz et al., 2001; Kibey et al., 1992), such as depression and impulsivity (Ball and Schottenfield, 1997; Rosenthal et al., 1990), as well as Psychoticism (Saize et al., 2001; Kibey et al., 1992), a trait related to low Agreeableness and low conscientiousness. Studies of heroin users consistently depict them as high on...
Neuroticism (Brooner et al., 2002; Tremeau et al., 2003; Blaszcynski et al., 1985, Kornor and Nordvik, 2007, Antonio et al., 2008). Many studies, show an association of heroin use with high Extraversion and high Psychoticism, but this association appears to be less robust (Tremeau et al., 2003; Blaszcynski et al., 1985; Kornor and Nordick, 2007).

Reviewing the latest studies concomitant impressions can be drawn on opiate drug addicts. Herion dependent patients (Group A) scored significantly higher on hysteria, masculine-feminine and social introversion subscale of MMPI and significantly lower on the harm avoidance subscales (Gerra et al., 2008). Chatha and Tung (in press) drew consistent results on opiate addicts, where they were found less emotional, avoided social interactions measures and expectations and high on impulsivity. Impulsivity has been time and again found significantly associated with substance abuse disorders (Von Diemen et al., 2008). Also it has been seen that respondents with risk consumption of substance had significantly higher level of antagonism and impulsivity and lower levels of hedonic capacity, alexithymia (difficulty in experiencing, expressing and describing emotional responses), and negative affectivity compared to those with no risk consumption of these substances. (Gunnarsson et al., 2008). Niraula et al. (2009) studied factors like education, occupation, short temper and depression which were significantly associated with drug abuse. In the same year Jose et al. (2009) also stressed the role of loneliness, understood as social maladjustment, and sensation seeking in the regular consumption of alcohol and other drugs.

On a broader prospect it has been seen that people with various substance use disorder seem to have a common personality profile. High Neuroticism, low conscientiousness and low agreeableness (Ball et al., 1997; Conway et al., 2003; Martin and Sher, 1994; Trull and Sher, 1994; Piedmont and Ciarrochi, 1999, Fisher et al., 1998; Terracciano and Costa, 2004).

1.5 PSYCHOPATHOLOGY AND DRUG ADDICTION

In recent years substantial research has focused on the link between alcohol on drug abuse disorders and other disorders such as antisocial personality, depression, and schizophrenia. About half of the persons with schizophrenia have either alcohol
or drug abuse dependency as well (Boston, 1997). With respect to antisocial personality and alcohol abuse, the relationship is strong (Harford and Parker, 1994; Kwapil, 1996), though by number means completely overlapping or clear in terms of which (if either) disorders causes which (Carroll, Ball and Rounsaville, 1993). Also higher rates of substance abuse are found among antisocial personalities (Clark, Watson, Reynolds, 1995).

Although MDP is the most common personality disorder, it has been found in a substantial segment of the heterogeneous substance abusing population (Leal, Ziedonis and Kosten, 1994) being quite indicative of severe addictions and poly-substance dependence (Mc Dermott et al., 1998; Flynn et al., 1996). MDP is predictive of addiction with an estimated predominance among addicts between 20% and 50% contingent upon the setting (Beck et al., 1993; Mueser et al., 2003).

Research estimates that approximately 18% alcoholics and 60% of drug dependent into satisfy the criteria for a personality disorder, mainly within cluster B (Kokkevi et al., 1998; Rounsaville et al., 1998; Verheul et al., 1998; Westermeyer et al., 2003).

The two psychopathological conditions that have been most frequently linked to addictive disorders are depression (Kranzler et al. 1997) and antisocial personality (Cadoret et al. 1985; Rounsaville et al. 1998). Most of the research has related antisocial personality and addictive disorders, with about 75 to 80 percent of the studies showing strong association (Alterman, 1988) and conduct disorders (Slutsky et al., 1998).

The avoidant and dependent personalities of cluster (the paranoid classification in cluster A) also exhibit significant rates of substance abuse (Ball, 2005; Magnavita, 2004). In a study on alcoholism and personality disorders Echeburua, Bravo De Medina and Aizpri (2005) determined that 40% of alcoholics met the DSM-IV-TR Axis II criteria at least one personality disorder and were 2.5 times more likely to have a personality disorder when compared to non-alcoholics.

The antisocial and borderline disorder of cluster B have the strongest positive correlation with psychoactive substance abuse. The underlying features of those acting out personalities, such as chronic anger, subjective denial, control issues, emotional withdrawal, self-process notion and flawed thinking create a susceptibility
to chemical abuse and intensify addictive behaviors (Beck et al., 1993; Evans and Sullivan, 2001; Ottomanelli and Adinoff, 2001; Ottomanelli and Adinoff, 2001; Magnavita, 1997).

However, other diagnostic groups have also been found to co-occur for example, schizophrenia (Buckley et al., 1994); borderline personality (Miller et al., 1993); anxiety disorders (Deas-Nesmith, Brady and Campbell 1998); and bipolar disorder (Mason and Ownby 1998). Nadeau and Landry (1999) also found passive aggressive, dependent avoidant, borderline or schizoid personality characteristics. Consistent with the earlier research Biopolar disorder especially adolescents onset is a significant risk factor for substance use disorder (Wilens et al., 2006).

The Coexistence of BPD and substance abuse disorder is estimated to be between 5% to 32% (Westermeyer et al., 2003). The literature reports prevalence rates of 39% to 84% for BPD patients and with substances abuse disorder and a median rate of 18% of substance abuses being diagnosed CBPD (Van den Bosch, Verheul, and Van den Brink, 2001). As dependent and avoidant personality disorders appear to heighten the proneness to abuse substance, BPD seemingly perpetuates substance use (Fassino et al., 2004).

Substance use disorder is over presented in individuals with biopolar spectrum disorder. The comborbidity of depression alone with drug abuse is well established and has important therapeutic prognostic implication (Volkow, Nora 2004). Repressive states and substance use in adolescents many confidently overtime and are closely but rather synchronically related (Chinet et al. 2006). Depression is associated with several substances related behaviors and select associations are stronger according to gender (Kenneth, et al 2008). Also substance use is a significant problem for people with several mental health problems such as schizophrenia. It has high prevalence and is linked to poor clinical and social outcomes (Hadock and Barrowclough 2007, Talamo et al., 2006). Further on its seen children with seen ADHD symptomatology and comborbid antisocial behavior are at the highest risk for peer-mediated, substance use in adolescence (Marshal; Molina and Brook, 2006). Its seen ADHD and its co-occurring comborbid psychopathology increase the risk for cigarette smoking and substances abuse disorder and is associated with greater SUD severity and Choronocity (Wilens and Biedman 2006). The same relationship was studied by Salaices (2006) and found significant, relationship between ADHD,
antisocial tendency and SUD. Most recently psychiatric complicity in young Cocaine users showed most Common AXIS-I diagnosis were mood disorders (26.6%) and anxiety disorders (13%). So we have witnessed that depression, Bipolar, Schizrphrenia, ADHD and Antisocial personality disorders and the most common pathologies underlying addict behavior.

1.6 COPING STRATEGIES AND DRUG ADDICTION

Stress has been identified as a factor which may have a central role in the process leading to substance abuse. As research has investigated the correlates of drug use in search of the causes of drug addiction, a stress model has emerged which views drug use as a coping mechanism (Adams, 1988; Bry, 1983; Sullivan and Guglielmo, 1985).

Chronic drug use develops as a means of coping with stress and its consequent negative emotional reactions. Psychological distress and limited coping resources are antecedents of drug use which serves as self-medication to produce a more desirable state of being.

There are many reasons why people use drugs, a method of coping with stress is only one of them. All types of drugs may be used for this purpose if they have effects that can either lesson negative or increase positive affects.

Wills and Shiffman (1985) postulated that the dual purpose of decreasing negative affect and increasing positive affect was key to stress drug use connection. Their model posits that elevated levels of negative events, accompanied by problem appraisals and negative physiological reactions associated with stress, would mostly lead to a search for something to reduce those negative feelings. Alternatively, the experience of few enjoyable events and lack of stimulation would more likely lead to the search for something to increase positive affect. Drugs offer a readily available way to achieve either of these changes in affect.

Often addictions are considered to be the result of poor or inadequate coping mechanism. Unable to cope with life stresses, addicts turn to their addiction for escape or comfort. From this perspective, individuals use substances as alternative coping mechanisms and rely on their addiction to manage situations, particularly those that engender feelings of frustration, anger, anxiety or depression (Wills and Shiffman, 1985).
Appraisal-focused coping, problem focused coping and emotion-focused coping are considered important domains of coping responses (Lazarus and Folkman, 1985; Moos, Finney and Cronkite, 1987). One’s ability to cope with stress-in particular, with anger, frustration, boredom, anxiety and depression has been identified as a critical deficit area in many theories or models of addiction (Pandina et al., 1992). In particular, emotion focused coping has been identified as an important dimension.

The social learning perspective emphasizes social cognition and not simply coping. Bandura’s social cognitive theory tends to focus more on cognitive expectancies, vicarious learning, and self regulation as explanatory mechanism for addiction (Bandura, 1986; Di Clemente, Fairhurst and Piotrowski, 1995).

Coping and social learning perspective have become quite popular among addiction researchers and clinicians. However, many successful businessmen and athletes who appear to have good general coping skills, or at least skills good enough to become successful in a competitive environment, get ensnared by addictive behaviors. Generalized poor coping cannot be the only reason individuals become addicted. That seems particularly true for people who engage in the behaviour because of the positive enjoyment effects and not simply the relief of problematic emotions (Orford, 1985). However, even if coping defects are not the critical reason for the acquisition of addictive behaviours, one important consequence of addiction is a narrowing of the addicted individual’s coping repertoire. Thus, coping responses may be more important as a way to remediate the consequences of an addiction than as a contributor to its acquisition (Stiffman and Wills, 1985).

It is also important to remember that the pathways to becoming addicted are, no doubt are complex (Kassel et al., 2005). However, of the numerous factors believed to heighten vulnerability both to drug use initiation and subsequent development of addiction the role played by various forms of psychopathology and emotional distress appears particularly critical.

In a recent study by Ebrahimi, A. (2002), he studied stress coping skills in addicts and non addicts and found that, stress coping skills in addicts were different from those of non-addicts in most of the coping procedures. Non-addicts reported that they used problem-focused coping and some of the emotional focused coping
strategies. In contrast, addicts showed that they used useless and non-effective stress coping strategies. He discussed that using ineffective stress coping skill is one of the predisposing and precipitating factors in addictive behaviour.

Stress can be a major trigger for both the initial development of addiction as well as maintaining it. So to cope with stress is a very important factor we have to study. Further on we will study some models of coping and some maladaptive coping skills used by addicts which leads them into a relapse and then study the link between coping and personality.

(a) Models of Coping

Some models of coping have proposed that coping responses are dictated mainly by the characteristics of the situation and not the individual (Lazarus and Folkman, 1984). Alternatively advocates of the coping traits model argued that individuals utilize the same adaptational resources, regardless of the severity, endurance, and specificity of the stressor (Moos, 1974). By Contrast, Folkman and Lazarus (1980, 1985); Lazarus and Folkman, 1984) proposed both that coping responses reflect a variety of situational and individual factors and that the nature of the interaction between these factors with each stressor as do the types of coping responses chosen. Whereas the coping trait model failed to anticipate the variety of coping responses seen in different situations, Folkman and Lazarus model addressed these limitations by conceptualizing coping as a process that is responsive to the immediate demands and potential consequences of an event as well as the emotional state of the individual.

Although the coping traits model has been largely replaced by the coping process model, empirical evidence has failed to either support or refute either model fully. An individual decision to employ a certain coping response or set of responses when faced with a stressful situation cannot be accounted for adequately by either situational determinants or dispositional characteristics alone; the stress-coping process is influenced simultaneously by many factors, including motivation, situation and disposition. While the coping process model proposes that an individual coping responses differ according to the severity and intensity of the stressor, there is no evidence to suggest that coping responses differ from other behavioural, affective and
cognitive responses (Costa; Somerfield and McCrae, 1996). Accordingly, it is reasonable to propose that individual access the same fundamental resources, such as personality features, to respond to all situations, regardless of their severity and intensity (Watson and Hubbard, 1996). For example, the personality dimensions of Neuroticism is related to several aspects of the coping process, from the initial appraisal of the stressful episode (Costa and McCrae, 1990; Watson and Clark, 1984) to the decision about which coping resources to use (Bolger, 1990; Watson and Hubbard, 1996). Compared to non-neurotic individuals, those high on dimensions of neuroticism are more likely to interpret life events as negative or threatening (Costa and McCrae, 1990; Watson and Clark, 1984) and describe themselves as prone to experience negative mood states, such as anxiety, fear and depression (Clark, 1993).

It is also possible that certain personality features, depending on the severity of the stressors, dictate whether adaptive or maladaptive coping responses are accessed. Individual with high self esteem and an easy going disposition responded to high threat events with effective and active coping strategies, consequently, had lower rates of depression than individual with less adaptive personality (and coping) features (Holahan and Moos, 1991).

(b) Role of personality in coping process

Personality features and coping mechanism are not independent of each other (Hooker, Frazeir and Monahan, 1994; McCrae and Costa, 1986; Watson and Hubbard, 1996), providing further support for the importance of personality domains in the stress-coping process.

In the coping traits model, the choice of which coping mechanism are utilized has been shown to be determined, in part by the personality features of the individual (e.g. Hooker et al., 1994; McCrae and Costa, 1986; Watson and Hubbard, 1996). Neuroticism has been consistently associated with increased use of passive, ineffective coping mechanisms (Endler and parker, 1990; Costa and McCrae, 1989). In several studies investigating associations between Neuroticism and responses to the ways of coping checklist (Folkman and Lazarus, 1980; 1985), Neuroticism correlated with increased use of wishful thinking, self blame, avoidance and emotion-focused thinking (Bolger, 1990; Hooker et al., 1994; Smith, Pope, Rhodewalt and Poulten,
The use of ineffective coping skills is not unexpected considering correlates of the trait dimensions of Neuroticism; neurotic individuals tend to respond to negative events with sadness, guilt, anxiety, and anger. Additional personality trait dimensions have been linked to specific coping responses. For example, extraversion (a dimension measuring the extent to which an individual approaches life with enthusiasm, pleasure, and optimism) was associated with increased use of active, deliberate, and constructive coping mechanisms and the decreased use of emotion-focused strategies (Hooker et al., 1994, McCrae and Costa, 1986; Watson and Hubbard, 1996).

Further, the personality dimension of Conscientiousness was associated with increased use of problem solving, positive reappraisal of stressful episodes and support seeking coping techniques in a sample of military personnel (Vickers et al., 1989) and increased use of active, planful coping and increased use of denial and avoidance coping in a sample of university students (Watson and Hubbard, 1996). This pattern of coping responses is consistent with the behavioral correlates of Conscientiousness; individuals high in this trait are hard working and think through their problems carefully, whereas individuals low in this trait are not overly involved in their work and act impulsively and carefully (Clark, 1993).

The association between personality features and coping resources has been studied most frequently with community samples, college students, and medical patients, finding from two studies indicate a comparable link between the personality features and coping resources of substances abusers (Kruegelbach et al., 1993; Nace, Davis and Gaspari, 1991). Nace et al. found that substance abusers diagnosed with at least one personality disorder reported greater use of avoidance and emotional discharge as a means of coping with stressful life events than substance abusers without personality disorder.

Similarly, Kruegelbach et al. reported that the presence of borderline personality disorder among substances abusers was associated with increased use of avoidance coping skills and decreased use of planful, problem solving and positive reappraisal coping skills in response to internal and external stressors.

Quirk and McCormick (1998) found that substance abusers scoring the highest on Neuroticism and the lowest on Agreeableness, Conscientiousness, and Extraversion compared to other substance abusers reported having the highest levels of Escape-
avoidance coping prior to treatment. Conversely, individuals who scored the lowest on neuroticism, but highest on extraversion, agreeableness and conscientiousness reported utilizing fewer escape-avoidance coping strategies or the least maladaptive coping patterns of any group in the sample.

Coping strategies have been assigned a prominent role in conceptualizing the process of alcohol relapse. For instance, the cognitive behavioral model of relapse outlined by Marlatt and Gordon (1985), proposes the risk of relapse begins when an individual does not possess adequate coping responses and encounters a high risk situation.

Coping strategies can be broadly differentiated into behavioral, cognitive and affective types. Individual in the initial stages of recovery tend to use more behavioral strategies, such as avoiding risk situations or taking action to avoid a relapse by attending self help groups. As abstinence is maintained for longer periods of time, cognitive and affective strategies become more predominant. These strategies include thinking about the negative consequences of using and the benefits of sustaining abstinence.

(c) Stress coping and temptation coping skills

Two types of coping mechanism are relevant to alcohol and drug dependent individual, attempting to maintain abstinence: stress coping and temptation-coping (Wills and Shiffman, 1985). Stress coping skills are used to manage stressful life events, such as threatening life episodes (e.g. divorce, death of loved one), ongoing difficulties (e.g. frequent conflict with employer or spouse), and unpredictable daily hassles. Temptation-coping skills are used in response to temptation to use drugs or alcohol; these skills are typically required in situation involving internal or external reminder of substance use or offers to use. Distinguishing between these two types of coping skills implies that situational factors primarily determine which coping skills are accessed.

When asked how they would handle everyday upsets, substances abusers exhibited a limited repertoire of coping skills and an impaired ability to access and enact available skills compared to non-abusive substance users (e.g. Conte et al., 1991; Cooper et al., 1992). Conte et al. (1991) compared alcoholic and non-alcoholic
males and females on a variety of coping factors. Compared to control subjects, alcoholics reported employing avoidance responses, such as suppression and substitution, non problem-focused responses, such as help-seeking, and blame strategies more often to cope with daily life problems.

(d) Stress-vulnerability model of stress

Several prospective studies have examined relationship among stressful life events, coping resources and alcohol and drug use (Brown, Vik, Patterson, Grant and Schuckit, 1995; Cooper et al., 1992; Finney, Moos and Chan, 1981; Moos, Finney and Gamble, 1982). Data from this body of research provide support for the stress-vulnerability hypothesis of relapse, which postulates that alcohol use following stressful life events is mediated by certain protective (e.g. adaptive coping skills) and risk (e.g. poor support network) factors (Brown et al., 1995). For e.g. Cooper et al. (1992) found that, among a sample of light, moderate and abusive drinkers, persons who tended to utilize avoidance coping strategies to manage stressful life events exhibited heavy, problematic alcohol use consequent to stressful life events. By contrast, person who relied on Avoidance form of coping did not drink alcohol abusively following stressful life events. Brown et al. (1995) replicated the finding of Cooper et al. (1992). Using a sample of male alcoholics who had experienced severe psychosocial stress. They found that males who used fewer coping skills overall showed an increased relapse rate following a severe stressor. Unexpectedly, frequent use of both adaptive coping strategies, such as active problem-solving and maladaptive coping strategies, such as avoidance and self blame, were related to decreased relapse rates. Finally, additional support for the stress-vulnerability hypothesis is provided in a series of studies conducted by Moos and Colleagues (Finney et al., 1981; Moos et al., 1982). They reported that alcoholics who tend to use avoidance forms of coping were more likely to drink following a stressful episode. Overall, these findings converge to provide strong support for a stress-vulnerability model of relapse to alcohol use, in which certain factors, such as frequent use of avoidance coping or less use of coping responses overall, increase alcoholics risk for heavy alcohol assumption when under stress.
As suggested by the work of Cooper et al. (1992) and Moos et al. (1982), not all coping strategies are equally effective in reducing the negative impact of stressful life events. Similarly, specific coping strategies are associated with relapse in temptation-coping situations, regardless of objective stress. For e.g. Neidigh, Gesten and Shiffman (1988) asked college students who were trying to reduce their level of alcohol consumption to describe the coping strategies they had used to deal with temptation to use alcohol. They reported that males who utilized more behavioral techniques, such a relaxation, seeking social support and delay urge to use and more cognitive techniques, such as willpower, self-revaluation and thinking through consequences had greater success in resisting alcohol use craving than males who employed fewer of these coping mechanisms. Similarly, Tarpert et al. (1994) found that male alcoholics who utilized fewer self blame coping strategies and more support-seeking and problem focused coping strategies (during hypothetical situation involving cues to use alcohol) consumed significantly less alcohol three months following treatment than males who more often employed ineffective techniques (i.e. self blame) and less often used adaptive techniques (i.e. support seeking and problem focused). The work of Tapert et al., Neidigh et al. and Rosenberg indicates that constructive, active coping mechanism may enhance one’s ability to resist the desire to use alcohol when presented with cues to use.

These coping strategies are not dissimilar to the type of responses associated with ability to maintain abstinence following stressful life episodes. That is, situations involving either temptation or stressful life events represent challenges to the coping repertories of substance abusers in treatment and similar coping skills are accessed to manage each situation. Thus, while stress-coping to temptation-coping skills may have unique faction during either substance use initiation or substance use maintenance. They may operate similarly during attempts to close substances use.

Evidence of a statistical relationship between utilization of coping strategies and treatment outcomes fails to explain the theoretical underpinnings of this relationship adequately. Certain individual difference factors place substance abusers at risk for relapse; the use of avoidance coping skills has been identified as a risk factor (Cooper et al., 1992). Additional factors, such as personality pathology, may identify individuals who are more likely to use a avoidance techniques when faced with a stressful event which, in turn, may lead to impaired behavioral outcomes.
Studies have linked the personality trait dimension of Neuroticism to increased use of Avoidance and other maladaptive coping strategies (e.g. Bolger, 1990) and this relationship was associated with increase in anxiety when individuals are under stress. Particular trait dimensions, such as Neuroticism, are believed to be critical to the stress. Coping process. Costa et al. (1996) have urged researchers investigating this process to include Neuroticism in their models. Additionally, the findings of Hooker et al. (1994), McCrae and Costa (1986), Watson and Hubbard (1996), and Vickers, Kolar and Hervig (1989) suggests that the personality trait dimensions of Extraversion and Conscientiousness may influence stress-coping relationships.

Later Richard et al. (1998) studied the coping styles and personality of substance abusers and found the consistent results highlighting substance abusers to be more neurotic and less Agreeable and Conscientious. Neuroticism was found highly related to Escape Avoidance coping, Agreeableness was negatively related to Confrontive coping and Conscientiousness was related to problem solving and negatively related to escape avoidance. Higher levels of Conscientiousness, Agreeableness and Extraversion were associated with greater confidence in ability to refrain from use, whereas Neuroticism was associated with a corresponding lack of confidence in self-restraint. Recently, in a meta-analysis studying relations between personality and coping (Smith and Flachsbart, 2007) found that personality may directly facilitate or constrain coping, but relations of personality to coping have been inconsistent across studies. It was seen that Extraversion and Conscientiousness predicted more problem-solving and cognitive restructuring, Neuroticism less. Neuroticism predicted problematic strategies like wishful thinking, withdrawal and emotion focused coping but, like Extraversion, also predicted support seeking.

Researchers studied the factors associated with the coping styles of detoxifying alcohol and drug patient, showed that depression was moderately useful predictor of wishful thinking the highest coping style utilized by patients. And also showed infrequent use of problem-focused coping strategy in abusers (Madden et al., 1995).

Coping as a predictor of substance abuse treatment outcome has been studied. Further variables related to abstinence and relapse have been studied, which is an objective of our study as well. It has been found that wishful thinking and social support contributed significantly to the prediction of total days using and length of
initial abstinence, respectively. These findings were interpreted to suggest that one’s cognitive approach to coping many impact drug and alcohol relapse by reducing appraised stress in a relapse-risk situation and, thus, decreasing active coping efforts (Myers, Brown and Mott, 1993).

In a more recent study, lifestyle coping strategies of cocaine abusers and relationship to treatment outcome was studied. Less cocaine use was associated with urge coping by thinking about negative or positive consequence, alternative behaviors, distraction, relaxation/meditation, escape, offer refusal, spiritual methods, behavior chains, mastery messages, problem-solving, meeting or sponsor, or seeking social support. The lifestyle change strategies of thinking about consequences, working towards goals, thinking of oneself as sober, clean recreation, regular relaxation, avoiding temptations, not carrying much money, living with clean people, seeking social support, spiritual involvement, keeping busy and health activities were also associated with less cocaine use (Rohsenow; Martin and Monti, 2005). On the contrary, for patients with low self-efficacy, reliance on avoidance coping strategies was associated with poorer alcohol use outcome. Both self-efficacy and coping strategies are important determinants of functioning for substance use disorder. As self efficacy increases, the negative effect of avoidance coping strategies diminishes (Levin; Ilgen and Moos, 2007). Further, it has been found that regular performance of prayers was very effective way of gaining coping skills to resist the urge to abuse. Also frequently used problem solving, feelings expression, forgiveness, refused and avoidance, positive lowered relapses (Elsheikh, 2008). Most recently it was seen that those who abused substances showed a more palliative coping style and had more severe emotional and behavior problems such as anxiety/depression and intrusive thoughts and aggressive and anti-social behaviors (Didden et al., 2009). In a study comparing levels of substances use, coping styles and high-risk triggers for substance use among adults with SUD, with or without comorbid PTSD (Post traumatic stress disorder) found severity of PTSD was a significant predictor of negative situational drug use and emotion-focused coping was found to mediate this relationship (Staiger et al., 2009). More clearly the coping strategies, especially escape avoidance coping, is found to influence daily variation in craving and in turn affect abstinence (Cleveland and Harris, 2009).
1.7 CONSEQUENCES OF DRUG ADDICTION

The ramification of drug abuse extend for beyond the individual drug abusers, because the health and social consequences of drug abuse HIV (humane immunodeficiency virus/ acquired immune deficiency syndrome) violence, tuberculosis, fetal effects, crime and disruption in family workplace and educational environment have devastating impact on society.

(a) Work, Employment and Productivity

Drug abuse occurs most frequently among young people in the 15-35 age groups, with a particular concentration in the 18-25 age group. It thus includes those who have entered or who are just about to enter the workplace. Given the high unemployment rates in many countries, entering or remaining in the workforce, while frustration caused by failure to find adequate employment favours drug consumption, thus creating a vicious circle.

An earlier study carried out in California, found that “disruptive use of all drugs was significantly correlated with … loss of job during the past four years, loss of job in the past six months, increased trouble with job, increased vandalism at work and increased seeking of … advice … for a work problem (Newconts, 1993). Another study carried out by the International Labour Organization (ILO) and the European countries found that more than half of the interviewed employer’s associations, enterprise and worker’s organizations reported specific performance impairments and absences from work as a result of drug and alcohol-related problems. In approximately two out of five cases, organizations were forced to dismiss employees for drug and alcohol related reasons, which clearly shows the severity of the problem (Smith, 1993). The links between low productivity, accidents and drug taking behaviour are well established. Drug abuses in the workplace impose significant extra cost on the business sector, thus reducing its competitiveness.

(b) Family and Community

The disintegration of the family appears to be related, in some way, to problems of substance abuse. The country study carried out by UNRISD and the
United Nation University on Mexico, for example, shows that illicit drug abuse correlates more strongly with the disintegration of the family than with poverty (Toro, 1995). Similarly, the country study in the same series on the Lao people’s democratic republic found that in areas where social controls exercised by the family and the community had broken down, opium and heroin consumption became prevalent among young men, women and children and affected as much as ten percent of the population (Henning, 1993).

The country study on Thailand attributes increasing use of heroin and psychotropic substances to urbanization, rapid cultural changes and a breakdown in family cohesion (Renard, 1993). The relationship could also work the other way, with substance abuse straining family relationships and ultimately making families dysfunctional; transforming families from an asset of society into a burden. Family factors thought to lead to, or intensify, drug abuse include prolonged or traumatic parental absence, harsh discipline, failure to communicate on an emotional level and parental use of drugs. When an infant is born, parental abuse of illicit drug or alcohol may continue, often resulting in a chaotic life style and an environment increased or responsive caregiving (Mayes, 1995) abuse and child abuse and neglect (Kolener et al., 1994; Dore et al., 1995). Neumoreous correlational findings suggest that drug abuse impairs parenting capacities (Mayes, 1995). These includes (a) the association of parental drug abuse with other psychiatric disorders, including depression and antisocial personality (b) Multigenerational transmission of both drug abuse pattern and psychiatric disorder, (c) a high incidence of violence, both between adults and towards children, (d) an increased risk of abandonment and neglect; and (e) a generally poor sense of competence as a parent and a poor understanding of needs of children.

Recently a stress-coping model for conceptualizing the impact of substance abuse on families was studied and was found that substance abuse can have such destructive impact on a family that it can both interrupt and transform entire family life (Master and Samuel, 2006).