Universitat Autònoma de Barcelona

Prediction of the Attitude towards Drug Use based on Assertiveness and Psychological Hardiness

Ali Kazemi

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DOCTORAL THESIS

Prediction of the Attitude towards Drug Use based on Assertiveness and Psychological Hardiness.

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Thesis Supervisors:

Dra. Teresa Gutiérrez Rosado and Dr. Joan Deus Yela

PhD in Psychology of Communication and Change

Interuniversity, Joint PhD. Organising universities:

Autonomous University of Barcelona & University of Barcelona

Associated Department of Basic, Developmental and Educational Psychology

July, 2020 Barcelona, Spain

Acknowledgement

No one who achieves success does so without acknowledging the help of others.
The wise and confident acknowledge this help with gratitude
(Alfred North Whitehead)

I would like to express my gratitude sincere to my professor Dra. Teresa Gutiérrez Rosado for supporting me during this thesis, her friendly relationship and kindness to me.

A very special gratitude goes out to my professor Dr. Joan Deus Yela for being helpful and supportive. I thank both professors for their dedicated support and cooperation in time delivery of thesis during the period of Iran's crises.

Proudly I dedicate this thesis to:

Mr. Pau Gomar Sánchez

Because at the beginning of my new life in terms of social life in Spain as a foreign country through learning new language and obtaining my PhD he was my scientific supporter. From the bottom of my heart I would like to say big thank for accepting me with amazing generosity and understanding as a family member and many thanks to his wife Mrs. Pilar Viana Górriz, her kindness made this country my real home and presence of this family paved my way.

Finally, I must express my very profound gratitude to Mr. Sirous Khadem Samimi**.** For unfailing support and continuous encouragement throughout my years of study.

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RESUMEN

Antecedentes: El fenómeno de la drogadicción ha traspasado los límites de la salud y ha dado lugar a una crisis social con efectos muy perjudiciales sobre los individuos, la comunidad y las sociedades donde viven. La adicción a drogas constituye uno de los principales problemas de la salud pública a nivel internacional y en cada país, dado los importantes y complejos problemas que se derivan del desarrollo de hábitos adictivos en la población. Esta complejidad surge del hecho de que la drogadicción es un problema biológico, psicológico, social, económico y cultural y por tanto requiere del abordaje desde diferentes perspectivas para superarla y lograr un cierto éxito. En el ámbito de la salud es uno de los problemas donde más se requiere hacer inversiones e investigación en prevención primaria siendo igualmente necesario el desarrollo del conocimiento clínico para afrontar sus efectos.

Desde la perspectiva psicológica, una de las estrategias más importantes para prevenir la adicción es el desarrollo de actitudes desfavorables hacia el consumo de drogas. Múltiples investigaciones han puesto de manifiesto que las actitudes modulan los comportamientos y en concreto, sabemos que pueden actuar como un factor de riesgo o protección hacia el consumo de sustancias. Las actitudes a su vez, se ven influenciadas por diferentes variables y en esta investigación nos centraremos en analizar en qué medida se ven influenciadas por dos habilidades psicológicas: la asertividad y la fortaleza psicológica. Se ha documentado ampliamente que la asertividad favorece una mayor confianza en sí mismo, potencia comportamientos más independientes, permite un mejor afrontamiento de las demandas del entorno, contribuye a la autoeficacia, favorece la experimentación de emociones positivas y afectas a las relaciones interpersonales entre otras. A su vez, la fortaleza psicológica ha sido definida como un estilo de personalidad que incluye los componentes de compromiso, control y desafío, pudiendo actuar como un factor protector ante la presión del medio o el estrés y contribuyendo a un mejor rendimiento y salud mental.

Objetivos e hipótesis: El objetivo de esta investigación fue predecir la actitud hacia el consumo de sustancias en base las características de asertividad y fortalezas psicológicas en una muestra de personas adictas en tratamiento. Planteamos como hipótesis que mayor asertividad y mayor fortaleza psicológica favorecen una actitud negativa hacia el consumo de drogas.

Metodología: Se presenta una investigación con diseño observacional, descriptivo y relacional de corte transversal. La muestra de participantes es de conveniencia y está formada por un total de 200 pacientes que reciben tratamiento por trastornos por uso de sustancia en 8 centros

especializados en adicciones de Teherán. Concretamente contamos con 138 hombres (69,2%) y 62 mujeres (30,8%), con una edad entre 20 y 40 años (M=32,50 y DE= 0.94). El 68% de la muestra presenta un historial de consumo de drogas entre 2 y 7 años, siendo el opio la droga principal de consumo en el 40,20%, seguida de la metanfetaminas o "crystal" (15,16%), el crack (9%) y la heroína (8%). Se utiliza como variable criterio la actitud hacia el consumo de drogas y como variables predictoras la asertividad y la fortaleza psicológica y dichas variables se evalúan con instrumentos estandarizados y validados en población Iraní: Cuestionario de actitud de Nazari, Inventario de Asertividad de Gambrill y Richey y el Cuestionario de fortaleza de Barton. Los análisis de datos se hicieron con el programa SPSS e incluyen estadísticos descriptivos, análisis de correlación de Pearson, análisis de la variancia y de regresión múltiple.

Resultados: La muestra está formada mayoritariamente por hombres (69,2%; n=138), jóvenes entre 20 y 30 años (65,8%; n=132), con niveles de formación secundaria o inferior (67,2%; n=136), casados (48%; n=96) o divorciados (18%; n=36), de clase social baja (46%; n=82) y media (35%; n=70) y mayoritariamente con empleo (68%; n=136). La media de años de consumo es 3,14 años (DE=0,98) y la principal droga de consumo en hombres y mujeres es el opio (40,2%; n=80) y el glass (15,16%; n=30). Los hombres consumen en mayor proporción heroína (9,42%), crack (12,32%) y hachís 86,52%). Se observa que en los niveles de formación de grado universitarios se consume en mayor porcentaje el crack, hachís y éxtasis. A menor nivel de formación mayor porcentaje de consumidores de opio, glass y heroína. En las variables psicológicas estudiadas de actitud, fortaleza psicológica y asertividad no se observan diferencias significativas respecto al conjunto de variables del perfil psicosocial y clínico. Tan solo se detecta una diferencia significativa en la muestra, siendo la actitud hacia el consumo de drogas más favorable en clases sociales bajas. Los resultados mostraron que existe una relación negativa y significativa entre la fortaleza psicológica y la actitud hacia el consumo de drogas (-.709**), e igualmente entre asertividad y actitud hacia el consumo de drogas (-.791**). Los resultados indican que la asertividad, con coeficiente estándar - 0,650, y la fortaleza psicológica, con coeficiente estándar - 0,381, son predictores significativos de la actitud hacia el Uso de Drogas.

Conclusiones: Las variables psicológicas de fortaleza y asertividad predicen en un 65% la actitud hacia el consumo de drogas. Estos resultados tienen implicaciones mayoritariamente en el ámbito de la prevención primaria.

Palabras claves: Uso de Drogas, Actitud, Asertividad, Fortaleza Psicológica, Factor de riesgo, Factor Protector, Prevención Primaria.

ABSTRACT

Background: The phenomenon of drug addiction has crossed the limits of health and has given rise to a social crisis with very detrimental effects on the individuals, the community and the societies where they live. Drug addiction constitutes one of the main public health problems at the international level in every country, given the important and complex problems derived from the development of addictive habits in the population. This complexity arises from the fact that drug addiction is a biological, psychological, social, economic and cultural problem and therefore requires an approach from different perspectives to overcome it and achieve some success. In the health field, it is one of the problems where investments and research in primary prevention are most required, and the development of clinical knowledge is also necessary to face its effects.

From a psychological perspective, one of the most important strategies to prevent addiction is the development of unfavourable attitudes towards drug use. Multiple investigations have shown that attitudes modulate behaviours and specifically, we know that they can act as a risk factor or protection towards substance use. Attitudes, in turn, are influenced by different variables and in this research we will focus on analysing to what extent they are influenced by two psychological abilities: assertiveness and psychological hardiness.

It has been widely documented that assertiveness favours greater self-confidence, promotes more independent behaviours, allows a better coping with the demands of the environment, contributes to self-efficacy, favours the experimentation of positive emotions and affects interpersonal relationships, among others. In turn, psychological strength has been defined as a personality style that includes the components of commitment, control and can act as a protective factor against environmental pressure or stress, and contribute to better performance and mental health.

Objectives and hypotheses: The objective of this research was to predict the attitude towards substance use based on the characteristics of assertiveness and psychological hardiness in a sample of addicts undergoing treatment. We hypothesized that both assertiveness and psychological hardiness favour a negative attitude towards drug use.

Methodology: An investigation with observational, descriptive and relational design of cross section is presented. The sample of participants is of convenience and consists of a total of 200 patients receiving treatment for substance use disorders in 8 specialized addiction centres in

Tehran. Specifically, we have 138 men (69.2%) and 62 women (30.8%), with an age between 20 and 40 years (M=32,50 and SD= .94). 68% of the sample had a history of drug use between 2 and 7 years, with opium being the main drug of consumption in 40.20%, followed by methamphetamines or “crystal” (15.16%), the crack (9%) and heroin (8%).Attitude towards drug use is used as a criterion variable and assertiveness and psychological hardiness are used as predictor variables and these variables are evaluated with standardized and validated instruments in the Iranian population: Nazari's Attitude Questionnaire, Assertiveness Inventory of Gambrill and Richey and the Questionnaire for measuring the Hardiness of Barton. Data analyses were done with the SPSS program and includes descriptive statistics of the sample profile, Pearson correlation analysis, analysis of variance and multiple regression analysis.

Results: The sample is formed mainly by men (69.2%; n = 138), young people between 20 and 30 years old (65.8%; n = 132), with secondary or lower levels of education (67.2%; n = 136), married (48%; n = 96) or divorced (185; n = 36), of low social class (46%; n = 82) and middle (35%; n = 70) and mostly with employment (68 %; n = 136). The mean number of years of use is 3.14 years (SD = .98) and the main drug of use in men and women is opium (40.2%; n = 80) and glass (15.16%; n = 30). Men consume heroin (9.42%), crack (12.32%) and hashish 86.52%) in a higher proportion. It is observed that crack, hashish and ecstasy are consumed in a higher percentage in university degree training levels. The lower the level of training, the higher the percentage of opium, glass and heroin consumers. In the studied psychological variables of attitude, psychological hardiness and assertiveness, no significant differences were observed with respect to the set of variables of the psychosocial and clinical profile. Only a significant difference was detected in the sample, with the attitude towards drug consumption being more favourable in lower social classes. The results showed that there is a negative and significant relationship between psychological hardiness and attitude towards drug use (-.709 **), and also between assertiveness and attitude towards drug use (-.791 **). The results indicate that assertiveness, with a standard coefficient - 0.650, and psychological hardiness, with a standard coefficient - 0.381, are significant predictors of attitude towards drug use.

Conclusions: The psychological variables of hardiness and assertiveness predict 65% the attitude towards drug use. These results have mostly implications in the field of primary prevention.
Keywords: Drug Use, Attitude, Assertiveness, Psychological Hardiness, Risk Factor, Protective Factor, Prevention Primary.

Chapter One

Research Literature and Background

This chapter includes a general introduction to the research topic of the thesis and four chapters with more specific contents. Part I addresses addiction, definition of addictive substances and theories of addiction psychology including theories of psychoanalysis, psychiatry and behaviourism. Then, the classification of addictive substances is investigated based on the source of the substances, the addictive power of the substances, the type of dependency, the type of effect and the therapeutic effect of the substances. Part Two examines the addiction and its statistics in Iran. In Part Three, assertiveness is expressed and its two basic skills, learning principles, barriers, individual rights, characteristics of people in assertiveness, the history of the evolution of assertiveness training, rights and responsibilities, human rights and its current method have been studied. In Part Four, the psychological hardiness has been studied and hardiness, hardiness components including the components of control, commitment and fighting, hardiness and other personality constructs, its compositional structure, the capabilities of hard people, functional aspects and defensive mechanisms in hardiness have been explained.

1.1. Introduction

Today, the issue of addiction has moved beyond the boundaries of health and has become a social crisis and a phenomenon with disastrous effects. Drug abuse is one of the most controversial issues attracting experts' attention in the field of psychology and sociology. It can be surely stated that nowadays the increasing use of addictive substances is one of the greatest and most complex problems of human societies. This complexity arises from the fact that drug addiction is a biological, psychological, social, economic and cultural problem, and this issue cannot be considered only from one perspective, because in this case, as experience has shown, little success will be achieved (Pourchenari & Golzari, 2008).

One of the most important strategies in preventing addiction is to change the attitudes and to maintain negative attitudes towards drug abuse. Attitude means the individual beliefs about the outcome of any deed and the value that the individual considers for this outcome. Attitudes are the rational reasons for behaviour of each particular person. There are many factors affecting the attitudes of individuals; in this research, assertiveness, psychological hardiness, attitude are examined.

Assertiveness affects interpersonal relationships and enhances behaviours such as independence, self-confidence and self-consciousness (Kilkus, 1990); considering the point that this skill contributes to adaptation in social interactions (Azaïs et al., 1999) and has cognitive, emotional and behavioural aspects, and represents the ability of an individual to deal with environmental demands effectively. Also, individuals who have appropriate courage are not only well-confronted with problems and stressors, but also have more positive cognitive assessment of their success in dealing with these factors, and they would consequently experience more positive emotions (Poyrazli et al., 2002, cited by Mohammad and Keykhay, 2011).

Psychological hardiness is a personality style that includes the components of commitment, control and challenge and encourages the development of individuals' lives. Kobasa (1979) created the concept of hardiness and, using existing theories of personality, defined the hardiness as a combination of beliefs about selves and world that stems from integrated and coordinated practice of commitment, control, and challenge.

Evidence of subsequent researches indicated that hardiness facilitates individuals' ability to cope with job pressure and acts as a protective shield against pressure (Lambert, lambert& Yamase, 2003). Individuals with low hardiness show severe emotional reactions to life problems, and in the long run, they experience the most damage through mental stress, while individuals with high hardiness remain healthy despite the overwhelming conflicts and events that are painful to others (Kobasa, 1979). Meddi (2007) also believes that hardiness can be defined as a factor of experience in maintaining health and increasing performance despite the stressful situation (cited by Mostaghni & Sarvqhad, 2012).

There are several reasons for tendency to drugs (Kipke, 1993). Some people abuse drugs for acceptance in community, and others try to pretend their growth and development, and some seek relief for their problems (Jessor, 1984; cited by Abolghasemi, et al., 2009).

We will now comment more specifically on the different sections and contents included in chapter one.

1.2. Addiction

Addiction is a disease in which the patient consistently repeats a behaviour that has bad side effects (Volkow et al, 2016). The disease impairs the control of behaviour-reward system, causing the repeat of behaviour (West & Brown 2013). The disease of addiction disturbs the nervous system of the reward system, motivation, and memory in the brain, and disorder in these systems in the brain causes biological, physiological, social and psychological complications[1] (Kampman, K., & Jarvis, M, 2015). The study of addiction is considered as a psychological, social and economic affair from the point of views of medical science, psychology and sociology, as well as the views of philosophy, law, ethics and religion. Since 1964, the World Health Organization has recommended the use of the term "drug dependence" instead of the term "addiction". Dependence on drugs or drug addiction is seen in all occupations, levels of education and the economic and social classes, and it is not allocated to specific individuals or strata (Koob, 2010). Given the high prevalence of drug dependence and the difficulty with its treatment, the efforts made to identify the risk factors for this problem in many populations are very important (Modesto-Lowe, 2010). Alcohol, cigarettes and drugs are through the addictive and dangerous consequences that are associated with many behaviours and developments in young ages and are a serious threat to individual life and community development (Anderson, 1998; cited by Ghazizadeh & Sanalanpour, 2009).

1.2.1. Definition of Addiction

Conceptually, the addiction disease is a major, chronic and neurological disease (Dreyer, 2010), that develops due to genetic, physiological and social factors. So that the characteristics of the disease are disturbance in the control of practical conduct, or the feeling of being compelled to perform a certain act, despite being aware of its dangerous consequences (Miller et al., 2013).

Addiction is the physiological response of body to repeated consumption of addictive drugs.[2] This dependence, on one hand, causes relief and temporary relaxation and sometimes transient irritation, and on the other hand, after the completion of these effects, one searches for to re-

[1] ASAM Board of Directors. "Definition of Addiction". Reconstituted on March 30, 2014

[2] Information Center for Iranian Students and Turkmen Graduates
http://www.turkmenstudents.com/modules/xfsection/article.php?articleid=27.

discover the drug and continuous dependence on it (Jacobs, 1986). In this case, both physically and psychologically, the person becomes dependent on the drug, and they have to gradually increase the amount of consumed drug[1] (Barman-Adhikari et al, 2017).

The DSM 5 criteria for substance use disorders are based on decades of research and clinical knowledge. This edition was published in May 2013, nearly 20 years after the original publication of the previous edition, the DSM-IV, in 1994. The DSM 5 recognizes substance-related disorders resulting from the use of 10 separate classes of drugs: alcohol; caffeine; cannabis; hallucinogens (phencyclidine or similarly acting arylcyclohexylamines, and other hallucinogens, such as LSD; inhalants; opioids; sedatives, hypnotics, or anxiolytics; stimulants (including amphetamine-type substances, cocaine, and other stimulants); tobacco; and other or unknown substances. Therefore, while some major groupings of psychoactive substances are specifically identified, the use of other or unknown substances can also form the basis of a substance-related or addictive disorder.

The activation of the brain's reward system is central to problems arising from drug use; the rewarding feeling that people experience as a result of taking drugs may be so profound that they neglect other normal activities in favour of taking the drug. While the pharmacological mechanisms for each class of drug are different, the activation of the reward system is similar across substances in producing feelings of pleasure or euphoria, which is often referred to as a "high." The DSM 5 recognizes that people are not all automatically or equally vulnerable to developing substance-related disorders and that some people have lower levels of self-control that predispose them to develop problems if they're exposed to drugs.

There are two groups of substance-related disorders: substance-use disorders and substance-induced disorder. Substance-use disorders are patterns of symptoms resulting from the use of a substance that you continue to take, despite experiencing problems as a result. Substance-induced disorders, including intoxication, withdrawal, and other substance/medication-induced mental disorders, are detailed alongside substance use disorders (DSM-5, 2013).

[1] - International Day against Drugs. "Islamic Republic of Iran Broadcasting Website. Revised August 13, 2007.

Criteria for Substance Use Disorders DSM-5 (DSM-5, 2013)

Substance use disorders span a wide variety of problems arising from substance use, and cover 11 different criteria1:

1. Taking the substance in larger amounts or for longer than you're meant to.
2. Wanting to cut down or stop using the substance but not managing to.
3. Spending a lot of time getting, using, or recovering from use of the substance.
4. Cravings and urges to use the substance.
5. Not managing to do what you should at work, home, or school because of substance use.
6. Continuing to use, even when it causes problems in relationships.
7. Giving up important social, occupational, or recreational activities because of substance use.
8. Using substances again and again, even when it puts you in danger.
9. Continuing to use, even when you know you have a physical or psychological problem that could have been caused or made worse by the substance.
10. Needing more of the substance to get the effect you want (tolerance).
11. Development of withdrawal symptoms, which can be relieved by taking more of the substance.

The Severity of Substance Use Disorders**.** The DSM 5 allows clinicians to specify how severe or how much of a problem the substance use disorder is, depending on how many symptoms are identified. Two or three symptoms indicate a mild substance use disorder[1]**;** four or five symptoms indicate a moderate substance use disorder, and six or more symptoms indicate a severe substance use disorder. Clinicians can also add "in early remission," "in sustained remission," "on maintenance therapy," for certain substances and "in a controlled environment."

Substance intoxication, a group of substance-induced disorders, details the symptoms that people experience when they are "high" from drugs. Disorders of substance intoxication include:

- Marijuana intoxication
- Cocaine intoxication
- Methamphetamine intoxication (stimulants)
- Heroin intoxication (opioids)

- Acid intoxication (other hallucinogen intoxication or "acid trip")
- Substance intoxication delirium

Substance/Medication-Induced Mental Disorders

Substance/medication-induced mental disorders are mental problems that develop in people who did not have mental health problems before using substances, and include:

- Substance-induced psychotic disorder
- Substance-induced bipolar and related disorders
- Substance-induced depressive disorders
- Substance-induced anxiety disorders
- Substance-induced obsessive-compulsive and related disorders
- Substance-induced sleep disorders
- Substance-induced sexual dysfunctions
- Substance-induced delirium
- Substance-induced neurocognitive disorders

Criteria for substance use dependence in ICD-10 (WHO, 2004)

Three or more of the following must have been experienced or exhibited at some time during the previous year:

1. A strong desire or sense of compulsion to take the substance;
2. Difficulties in controlling substance-taking behaviour in terms of its onset, termination, or levels of use;
3. 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 (or a closely related) substance with the intention of relieving or avoiding withdrawal symptoms;
4. Evidence of tolerance, such that increased doses of the psychoactive substance are required in order to achieve effects originally produced by lower doses;
5. 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 ;

6. 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 heavy substance use, or substance-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 (WHO, 2004).

1.2.2. Classification of addictive drugs

Number of addictive drugs that are produced from natural herbs, or in industrial and chemical forms, and their comprehensive classification according to certain criteria is complex and controversial. So far, several categories have been proposed for a variety of addictive substances, each of which has its strengths and weaknesses, and we will give a brief overview of them (Højsted et al., 2010):

Categorization based on origin of drugs

In the classification proposed by Deniker in 1971 (cited by Allahverdipour et al., 2012), all of the addictive substances are divided into two major categories based on the source of their preparation. These two categories are:

1. Materials derived from roots, leaves, flowers and fruits of plants, which are natural sources, such as opium, hashish, cocaine and alcoholic drinks.
2. Drugs that are chemically produced under laboratory and research conditions, in other words those with chemical origin, such as all types of sedative drugs and stimulants, such as barbiturates, benzodiazepines, etc.

Classification according to drug dependency

Some researchers, including Porot (1963, cited by Ahmadvand, 2010), have laid the foundations for the classification of drugs on the power of drug addiction. Accordingly, the drugs are divided into two categories:

1) Drugs that cause severe or deep addictions, such as heroin, opium, morphine, pethidine, codeine, etc.

2) Drugs that cause weaker addictions such as cigarettes, tobacco, coffee, tea, and some neurological drugs such as diazepam, etc.

Classification according to Dependency type

Varenne (1971, cited by Ahmadvand, 2010) believes that addictive drugs can be categorized based on the effect they produce in terms of dependency. He divides types of addiction into three groups:

1. Physical and mental dependency as well as the creation of the phenomenon of physical tolerance. The drugs that create these kinds of dependencies are heroin, opium, morphine, codeine, barbiturates, some tranquilizers, alcohol, etc.
2. Psychological dependence. The drugs that create these kinds of dependencies are: cocaine, marijuana, hashish etc.
3. Physical or physiological dependencies. The drugs that create these types of dependencies are: sedatives and strong antidotes.

Classification according to type of effect

Several authors group drugs into five categories:

1- sedatives- painkillers: Which contain alcohol (ethanol), barbiturates such as pentobarbital, seconal (sycobarbital), veronal (barbitol), titanium (sycobarbital and amobarbital). These drugs reduce stress, relax, sleep, and also facilitate the social relationships (Johnson, 2011).

2- Stimulants: Which contain amphetamines such as benzurin, doxedrine (dextrometamine), methadrenine (Meta amphetamine), and cocaine (cocaine) (Ambermoon et al, 2012).

3- Hypnotics and Narcotics: Including opium and its derivatives such as morphine, codeine, heroin, methadone, and so on; these drugs eliminate pain and produce feelings of tranquillity and euphoria and eliminate anxiety and tension (Gossop et al, 2008).

4- Psychedelics & hallucinogens: Including hashish, Peyote, Psychogenic & mushrooms (psycho-magic mushrooms), and Lysergic acid diethyl amid-25; using these drugs causes changes in emotions, thoughts and behaviours, and creating a sense of breadth of mind (Sessa, 2012).

5- Minor tranquilizers: Including Liberim (Chlorodiazepoxide), Milton (Meprobamate), Valium (Diazepam), and etc.; the consumption of these substances destroys tension and

anxiety, produces calmness and sleep (Kasarabada, Nagelakshami, Translated by Ahmadi, 2007).

Classification according to therapeutic effects of drugs

From the therapeutic effects' perspective, the World Health Organization (OMS) has made a special classification. This classification includes (Edwards et al, 1981):

1. Drugs whose medical consumptions are very rare (generally hallucinogenic).
2. Drugs that have multiple medical uses, such as amphetamines (benzodrin, doxedrine, methadren, etc.).
3. Drugs which have high medical uses and of course, high health risks, such as barbiturates, amyotal, nambutal, seconal, etc.
4. Drugs with high medical value and negligible risks, such as all types of Tranquilizers, hypnotics, analgesics, and etc.

Generally, according to the multiple categories provided, all the addictive drugs can be classified into four categories. These four categories are:

1- Opiates or narcotics
2- Hallucinogens
3- Stimulants
4- Tranquilizers (Ahmadvand, 2010)

1.2.3. Theory of Addiction Psychology

Psychological theories of deviation seek any abnormal behaviours and abnormalities such as addiction that are considered as a growing phenomenon in nature and their causal origins are found in the lesions and psychological and emotional injuries of a person (Bechara et al, 2019).

Hence, addiction or any abnormal behaviour is a self-imposed and self-selective choice to seek refuge in order to escape the personal painful relationships (Shadley & Harvey, 2013).

Theories of psychiatry and psychoanalysis

Psychiatry and psychoanalysis theories regard each bias and perversion as the result of early childhood experiences and patterns of family relationships. Such behaviour is largely based on the individual's inner psyche and the role of individual experiences in the development and occurrence of such behaviour is significant.

The outlines of psychiatric theories are based on the following principles (Fonagy, 2018):

a) Any abnormal and distracting behaviour is an inner product of individual and their soul. Perverts are mentally ill. Culture and social realities do not play much role in this process, and they are only backgrounds in which such behaviours are expressed in these areas.
b) All human beings have basic needs since birth, such as the need for psychological and emotional security.
c) A person's deprivation of satisfaction of such needs, especially in childhood, leads them to build and form a particular personality pattern. Childhood experiences, such as conflicts and psychological and emotional challenges, determine the person's personality structure most precisely, and specifically design their behaviour patterns for later periods. Hence, the amount of contradiction, disorder, retardation, or personality damage is different in relation to the degree of deprivation of individuals.
d) The first experiences of children in the family environment not only create their personality structure, but also largely determine their pattern of behaviour in later years of life.
e) The high level of personality traits such as insecurity and psychosocial inertia, feeling inadequacy, inability to express emotions, aggression, and so on, are devastating characteristics of the people who have first experiences of childhood in family environment. Hence, abnormal behaviours and derivations arise from the patients' personality, which, due to physical and social injuries, has not been able to reconcile and establish with social environment (Lorvick et al, 2018). For instance, a person who has a feeling of insecurity and mental instability may take refuge in drugs or alcohol and commit behaviours contrary to the community. Hence, Psychiatrists and psychologists believe that there are differences in personality qualities between perverts and non-perverts or normal and abnormal behaviours (Ahmadi & Rostami, 2014).

According to psychoanalytic theories, people who have a punitive super ego are more likely than others to drink alcohol in stressful situations (Dodes & Dodes, 2017). According to psychoanalysts, anxiety and stress in those who are in the oral phase may be reduced by the use of substances such as oral alcohol. Psychoanalysts believe that alcohol has the potential to overcome the super ego problems, and reduces the feeling of guilt, humiliation, and tension. Psychoanalyses describe alcohol-dependent individuals as sensitive and suffering, proud, shy, lonely, bored, irritable, anxious, and lacking in sense of strength and self-confidence (Allahverdipour et al., 2012).

Psychoanalysts consider the behaviour of opiate addicts as stabilizing libido in the stages of oral, genital or even more premiere stages of development, and they of course, emphasize on the stage of oral growth. At the oral stage, the child is free of all responsibilities and also completely reliant on external factors (Loose, 2018).

According to the conducted surveys, addicts are low-self-esteem people with a very negative attitude. Their readiness and power to deal with the ripples of life is less than that of ordinary people (Allahverdipour et al., 2012).

Addiction behaviourism theory

From the behaviour's point of view, each action is a product of past behaviour and the behaviour that an individual practice in environment always has consequences that also interact with future behaviours (Yang et al., 2017). Hence, the main concern of behaviourists is the functional relationship between behaviour and changes in the operating environment. The individual's response is always determined by the nature of the external stimulus, and so individual behaviour is a function of external stimuli (Newlin et al., 2012).

The source of human behaviour control is also the result of intensifiers in flow of communication between the individual and the external environment (Carver & Scheier, 2012). Regardless of abnormal behaviours, behavioural consequences contribute to the continuity of such behaviours. Therefore, in their view, the more the behaviour is seen as a kind of encouragement and reinforcement, the more probability that the person repeats the same behaviour. Two key concepts for behaviourists are encouragement and punishment (Sohrabi & Hadian, 2008).

When environmental changes are indicative of an exacerbation of event triggering to increase the likelihood of future behaviour, they are called boosters or encouragers. Punishment or penalty is the consequence of reducing the generality and repetition of subsequent responses. Hence, behaviourists emphasize on in the justification and analysis of deviant behaviours such as addiction to conditional stimuli of the environment and the reinforcements that sustain such behaviours and believe the current behaviour of the individual (normal and abnormal) is subject to this and It is influenced by how such behaviour has been encouraged and strengthened in the past (Sohrabi & Hadian, 2008).

According to the reinforcement theories, as Ward (1985), Steele (1990) and Lewis (1990) have pointed out: Stress reduction, increase in happiness, and a sense of well-being that comes with the use of addictive drugs and the effects of this augmentation cause the user to re-use toward drugs, especially when they are under much stress (cited by Commer, 1992). In support of this theory, studies have shown that stress-induced individuals are more likely to use alcohol rather than others (Jung & Herring, 1985, cited by Commer, 1992). In other words, scholars and other researchers in the theory of reinforcement state that individuals turn to drugs when they feel uncomfortable, worried and tense. In fact, people seek refuge from these unpleasant feelings in drugs that modify these feelings (Conger, 1956). According to this theory, it should be expected that the use of these drugs is higher among people with high degrees of depression, anxiety and aggression (Khantzian, 1985). The above-mentioned opinion has been approved by the American Psychiatric Association (1985) through the conducted researches. In a study of 835 depressed patients, it was figured out that more than a quarter of them had consumed addictive drugs during critical periods (Lewis, et al., 1985, cited by Commer, 1992).

In another study by Garwin and Kleber (1986), it was figured out that about 50 percent of cocaine users were the individuals who were diagnosed with depression according to international standards. On the other hand, a number of studies point out the fact that many individuals do not enjoy drugs when they take it for the first time. In a research conducted by some researchers on a number of volunteers on heroin use, a number of users were disdainful or indifferent to the condition they had experience through Heroin. For this reason, some addicts reported that their initial experience was similar to anything but a sense of happiness (Lindesmith, 1972). Even when a medication initially gives a person a sense of comfort and relaxation and reduces tension, this

will not always be the case, with the repetition of consumption and the passage of time, the situation will change. Continuing the use of drugs, many users will get nervous and depressed, and this situation gets worse with continuing the use (Nathan et al., 1978). The raised question here is, then, why do these individuals continue to use drugs? (Cited by Ghazinejad & Savalanpour, 2009).

Some behaviourists cite Solomon's opposite process theory to answer this question. In 1980, Solomon stated that the human brain is organized so that emotional excitement like the joy and euphoria through use of addictive drugs would inevitably lead to opposing processes; something called “Negative after effects". Getting involved in this process makes the person feel worse than usual. The individuals who continue to take joyous medications will inevitably experience the next opposite effects, such as the desire for more drugs, the quitting reactions and the need to increase the use (the phenomenon of tolerance). Solomon believes that opponent processes in human brain eventually dominate and suppress the joyful processes and avoiding the subsequent negative effects or rejection of the demand for pleasure becomes the primary motive for the consumption of drugs. It is worth noting that, as Peele (1989) states, this theory is not supported by systematic researches (cited by Ghazinejad & Savalanpour, 2009).

Some classical behaviourists, such as Lindesmith (1972), state that objects or tools used during drug use may play the role of conditioned stimuli and give the same pleasure as the drug itself. For instance, just a picture of a subcutaneous needle or a regular distributor of narcotics is considered as a relaxing factor for the heroin consumer or amphetamine addicts and reduces the withdrawal effects. Similarly, objects and tools may resemble the same the withdrawal effects. For example, a heroin addict may have a nausea and anxiety disorder when he returns to a home where they used to consume drugs in, just like the withdrawal effects at the time of drug addiction; the reaction that may make them turn back to heroin (O'Brien et al., 1986). Although these studies suggest that quitting reactions can be classically conditioned, other studies show that such a conditionality cannot occur in most cases. In an interview with 40 addicts who had previously quitted heroin, only 11 reported that when exposed to the environments and the objects and they were exposed to, signs of withdrawal were back again, and 5 of them started consuming Heroin again (McAuliffe, 1994). It can be shortly concluded that the description of the principles of classical conditioning in abuse of drugs and their dependence, such as an explanation of t principles of reinforcement, is eventually supported in a mixed and relative way (Makarem & Zanjani, 2013).

1.2.4. Risk and protective factors in drug abuse

In the last decades it has been developed a study of the risk and protective factors that contribute to explain the initiation and maintenance of drug use., Explaining drug abuse and dependency from the perspective of risk and protective factors is beneficial because it opens up a new horizon in early prevention programs and greatly reduces the high costs of treating abuse and dependency-related disorders.

Risk factors are traits or events that, if present in a person, are more likely to cause a disorder or disease. The protective and risk factors are at two extremes of a continuum. Having risk factors does not necessarily mean that the person is suffering from a disorder, but rather likelihood of risk increases in him/her. Also, protective factors do not mean that a person does not necessarily have a disorder, but rather the likelihood of being immune against the disease increases. There are numerous risk and protective factors for drug abuse and dependency. Before listing these factors, their characteristics are as follows (Jahanshahlou et al., 2016):

1- They act incrementally. This means that the factors can overlap, increasing the likelihood of danger or immunity. For example, being depressed, anxious, and having access to drugs increase the risk of abuse in individual.
2- They differ in quantity and quality. This means that each of the risk and protective factors is different in terms of quality and quantity. For instance, the quality of anxiety is different from that of depression.
3- Their importance varies in individuals or groups. In individuals or racial groups, these factors may act differently. For example, drug availability may be more important in one group while in the other group, having no religious attitudes acts as a major risk factor.
4- Their impact varies at different times in the life cycle. These factors vary in terms of being risky or protective depending on what age an individual is in and which period he/she is going through.
5- Their importance varies in terms of appearing the stages of drug use and its associated consequences. Each of the risk and protective factors can act differently in the appearance of drug use stages and have different consequences. For example, depression as a risk factor can initiate drug use in an individual in a particular way and cause different consequences for him/her.

6- These factors can change, meaning that preventive interventions can reduce depression or anxiety in specific individuals or populations, thereby reducing the probable risk. We can enhance protective factors such as religious attitudes and coping skills and increase the likelihood of immunity in individuals.

The followings are risk and protective factors in drug abuse and dependency (Cyders et al., 2009):

Risk factors- individuals	**Risky Situations**
- Adolescence period - Genetic predisposition - Personality traits - Anti-social traits - Aggression - Low self-esteem - Mental disorders - Major depression - Positive attitude towards drugs	- Dropping out of school - having no guardian - The positive impact of the drugs on the individual

Adolescence period: The riskiest life period for drug use initiation is adolescence. Adolescence is a period of transition from childhood to adulthood and the acquisition of individual and social identity. In this period, the desire for independence and opposition to parents reaches its peak and the adolescent questions the family values to prove his / her maturity and individuality, and create and analyse his/her own values. The combination of these factors, in addition to the curiosity, need for mobility, variety and excitement, make a person susceptible to drug abuse.

Genetics: There is different evidence of the genetic predisposition to alcoholism and drug abuse. The direct impact of genetic factors is mainly through the pharmacokinetic and pharmacodynamics effects of drugs on the body, determining the effect of the drugs on the individual. Some other risk factors such as some personality and mental disorders and poor academic performance due to learning disorders are also influenced by genetic factors.

Personality Traits: Different personality factors are associated with drug use. Among them, some traits are more predictive of the likelihood of addiction, and generally depict a person who is

unrelated to social values or structures such as family, school, and religion, or who cannot adapt to, control, or express painful feelings such as guilt, anger and anxiety. These traits include rejection of traditional and common values, resistance to sources of power, strong need for independence, anti-social traits, extreme aggression, lack of control over one's life, low self-esteem, and lack of social and adaptive skills. Since the first drug use usually starts from social environments, the more the individual's decision making power and communication skills and the better he or she can resist peers' pressure.

Mental disorders: In about 70% of cases, other psychiatric disorders are also associated with addiction. The most common diagnoses are major depression, antisocial personality disorder, phobia, dysthymia, obsessive-compulsive disorder, manic disorder, mania, and schizophrenia.

Positive attitude towards drugs: People who have positive or neutral attitudes and beliefs about drugs are more likely to be addicted than those with negative attitudes. These positive attitudes usually include achieving dignity and individuality, relieving physical pain and fatigue, achieving mental relaxation, and being able to use drugs without being addicted (White et al., 2006).

Individual risky situations: Some teens and youth are in situations or conditions that put them at the risk of substance use. The most important ones include exposure to violence during childhood and adolescence, dropping out of school, homelessness or parentlessness, running away from home, being physically disabled, and suffering from chronic illnesses or pains. Events such as the loss of loved ones or sudden natural disasters can also lead to acute psychological reactions. In this case, individual uses substances to reduce and adapt to the pain and suffering (Mahdavi & Heydari, 2017).

Effect of substances on the individual: This variable comes into play when the substance has been used at least once. How a substance affects an individual depends on the intrinsic properties of the substance used and its interaction with the individual and his/her status. The effect of substances on the user depends to a large extent on his/her characteristics. These characteristics include individual's physical condition, expectation of substance use, as well as the previous experiences of the effect of substances and other substances used simultaneously. Various substances have different effects on individual's physiological and mental status. For example,

heroin and cocaine cause severe euphoria, alcohol relaxation, and nicotine a brief vigilance and relaxation (Habibi, 2016).

Family-related factors: The family is the first place for developing personality and forming beliefs and behaviour patterns of an individual. In addition to being a place for individual's maintenance and growth and helping deal with stress and pathology, the family is also a source of stress, difficulty and disorder. Parental unawareness, poor parent-child communication, lack of discipline in the family, and upset or disruptive family increase the likelihood of committing such offenses as substance abuse. Also, parents using substances cause their children to model their substance abuse behaviour as a normal behaviour and behave similarly (Bagheri Jamkhaneh & Rasooli, 2015).

Effect of friends: In about 60% of cases, the first substance use follows friends' compliments. Relationship and friendship with peers with substance abuse is a predisposing factor for substance abuse, causing individual to try to get confirmation for his/her behaviour from his/her friends. Peer group is particularly effective at starting cigarette and cannabis use. Some friendships are solely centred on substance use. Teens need to belong to a group and it is often easy to join groups using drugs. The less a person's bond with the healthy family, school, and communities, the more likely he/she will have bond with such groups (Sasan, 2016).

School-related factors: Since school is the most important training and educational institution after the family, it can be a predisposing factor for substance use in teens through the following ways:

Disregard for substance use and the absence of severe restrictions or regulations for forbidding substance use at school, severe educational and environmental stresses, lack of support from teachers and officials for emotional and psychological needs when facing problems and being rejected by them (Salehi, 2010).

Residency-related factors: Many factors in the residential environment can lead people to tend to substance use (James, 2007; translated by Seifollahi, 2012):

These factors include lack of religious and ethical values, prevalence of violence and wrongdoing, abundance of false jobs, confusion and weakness of solidarity between local people and living in

suburbs. Individual characteristics and environmental factors are a part of the causes of addiction and the other part is the international markets for substances and socio-economic factors governing the society.

1.3. Epidemiological data on drug use in Iran

At this point we present very briefly some epidemiological data on drug use at the global level and in the European Union, in contrast to the data from Iran.

At the end of the twentieth century, the World Health Organization considers the issue of drugs including production, transmission, distribution and use, along with three other global issues, namely production and accumulation of weapons of mass destruction, environmental pollution, and poverty and class divisions, as the essential issues seriously threatening and challenging human life in the social, economic, cultural, and political dimensions globally. The increasing statistics of drug use are so much that one of the world's leading toxicologists, Luding, says: *If we exclude food, there is no substance on the earth that has been brought into the lives of nations as easy as drugs* (WHO, 1999, cited by Nouri et al., 2010).

According to the latest World Drug Report 2019 published by the United Nations Office on Drugs and Crime (UNODC, 2019), globally, some 35 million people, up from an earlier estimate of 30.5 million, suffer from drug use disorders and require treatment services. The death toll is also higher: 585,000 people died as a result of drug use in 2017. Prevention and treatment continue to fall far short of needs in many parts of the world. *"The findings of this year's World Drug Report fill in and further complicate the global picture of drug challenges, underscoring the need for broader international cooperation to advance balanced and integrated health and criminal justice responses to drug supply and demand"* (pp. 3, UNODOC, 2019).

Some of the most relevant data from the UNODC report (2019) regarding drug use are the following:

The number of people who have used drugs in the past year has increased by 30% (271 million people; 5.5% of the world population aged 15-64) compared to 2009 (210 million people).

Current data show an increase in the prevalence of opioid use in Africa, Asia, Europe and North America and of cannabis use in North America, South America and Asia.

The number of people believed to have drug use disorders is currently estimated at 35.3 million, at 15% higher than previous estimates of 30.5 million.

The most widely used drug worldwide remains cannabis (an estimated 188 million people used cannabis in the previous year). Over the past 10 years, the prevalence of cannabis use has remained stable at the global level, despite an upward trend in the Americas and Asia. The cannabis market appears to be in transition due to changes in its legal status in some countries.

— The consumption of opiates is increasing and so is the production of synthetic opiates. By 2017, some 53.4 million people worldwide had consumed opioids in the previous year, 56% more than in 2016. Of these, 29.2 million had used heroin and opium, an increase of 50% over the 2016 estimate of 19.4 million. The highest consumption of opiates (opium, morphine and heroin) is concentrated in North America (4.0% of the population using opioids). The Near and Middle East and South-East Asia sub-regions account for 1.6% of the user population. The Balkan route remains the busiest heroin trafficking route in the world. Afghanistan again accounted for the vast majority of the world's illicit opium poppy cultivation and opium production in 2018. From Afghanistan, it is transported to Western and Central Europe via the Islamic Republic of Iran, Turkey and the Balkan countries.
— Cocaine use is increasing in North America and in Western and Central Europe. The highest rates were found in North America (2.1%) and Oceania (1.6%).
— Methamphetamine use is a growing concern in several Regions. South East Asia stands out as the world's fastest growing methamphetamine market.

In the European Union (EU), the agency responsible for recording epidemiological data on drugs is the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA). Its latest report in 2019 summarizes some of the main problems related to the prevalence of drug use (EMCDDA, 2019) (See figure 1.1).

Among people who use drugs, polydrug consumption is common and individual patterns of use range from experimental to habitual and dependent consumption.

Cannabis is the most commonly used drug — the prevalence of use is about five times that of other substances. While the use of heroin and other opioids remains relatively rare, these continue to be the drugs most commonly associated with the more harmful forms of use, including injecting drug use. The extent of stimulant use and the types that are most common vary across countries, and evidence is growing of a potential increase in stimulant injecting. Use of all drugs is generally higher among males, and this difference is often accentuated for more intensive or regular patterns of use.

Iran

Currently, drug use has increased in Iran and has set the stage for many social damages (Nouri et al., 2010). Policy-makers in the area of anti-narcotics and anti-psychotropic drugs also need research to update their information and findings in order to design more effective programs in this area, providing them with the accurate insights into the number of drug users and addicts in the country, as well as an appropriate perspective of the current status of addiction.

Announcing different and contradictory statistics for the number of addicts in Iran by over-estimation and under-estimation approaches for the intended reasons has always increased the sensitivity of this issue and caused various denials or confirmations by the anti-narcotics police, its affiliated bodies and experts of social science. On the other hand, the intelligent, creative, active and dynamic system of narcotics and psychotropic drugs requires comprehensive, precise, yet rapid and dynamic interventions because of its multifaceted nature as well as the rapid and hidden changes.

Periodic study of addictive drug use pattern among addicts seeking treatment in health centres in Tehran province was conducted in 2010. The purpose of this study was to investigate some of the factors related to addictive drug use patterns among drug users referred to health centres for treatment in Tehran province, which its results represented a significant decrease in natural drug use (especially heroin) and an increase in crack (compact heroin) and glass abuse among the research samples. The sample of this study was 1108 addicts referred to Tehran health centres in the first 3 months of 2010. The results showed that 31.05% of addicts had used crack (compact heroin), 30.33% glass, 21.21% opium, 6.95% opium syrup, 1.62% heroin, 1.71% methadone and 7.22% other substances (Haj Rasouli, 2011).

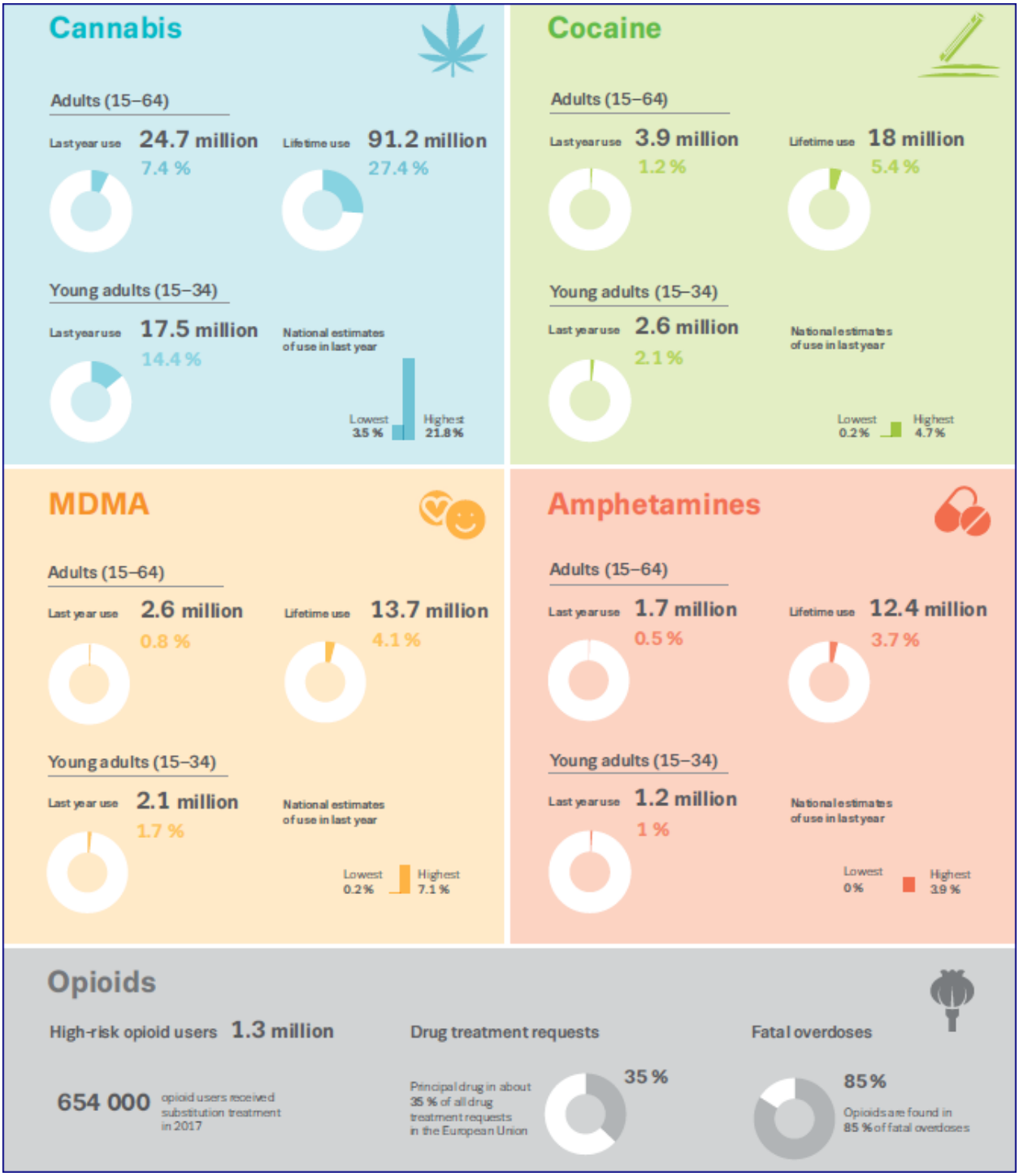

Figure 1.1 Estimates of Drug Use in the European Union [1]

[Documentary source: European Drug Report: Trends and developments (EMDDDA, 2019)]

[1] http://www.emcdda.europa.eu/system/files/publications/11364/20191724_TDAT19001ENN_PDF.pdf

A project was conducted by the Institute for Humanities and Social Studies of Academic Centre in 2011, entitled "The National Plan for the Epidemiology of Drug Abuse among Iranian Citizens" with the financial support of the Office of Drug Abuse Research and Training. The sample size was 15,000 households that from each household a member above 15 years old was interviewed. In this study, the prevalence rate for the population aged 15-64 was estimated 2.65% based on the 2006 census, which was 2.75% and 2.47% for urban and rural areas, respectively. The prevalence rate of drug use in the sample population for men and women was 90.7% and 9.3%, respectively. Drug users had mentioned their first use experience in a friend's home (28.46%) and their own home (22.28%), destroyed places (8.21%), parks (8.21%), dormitories (5%), alleys and streets (5.04%), educational environments (3.71%), workplace (3.71%), barracks (2.39%), prisons (0.27%) and no response (11.88%). The type of drugs used was opium (52.02%), glass (26.22%), crack or compact heroin (15.94%), heroin (9.77%), cannabis (6.43%), ecstasy (3.08%) and opium syrup (2.83%) (GhanbarBarzian & Dehghani, 2019).

Generally we can say this research can contribute to people to have psychological hardiness and enough assertiveness to prevent them to use drugs.

Some of the unofficial published statistics for the epidemiology of addiction indicating the different opinions on estimating the prevalence of addiction in Iran include:

- Deputy Director for Research Department of Addiction Research Institute of Tehran University of Medical Sciences: There are 5.3 million drug users and more than 5.1 million addicts in the country (News Telex: First Medical News Database: Iran Islam)
- The United Nations Office on Drugs and Crime (UNODC) Report: Iran has the largest number of addicts in its population among the countries of the world. Internal statistics for addicts vary from 2 million to 4 million (Iran Salamat)
- In Iran, addiction growth is three times larger than population growth: Annual addiction growth in the country is about 8%, while the country's annual population growth is about 2.1%. So the number of addicts is growing 3 times larger than population annually (Current deputy director for prevention department of the Welfare Organization of the country)
- Current Deputy Director for Health Department of the Ministry of Health and Medical Education: Between 5 and 7 million people in the country experience drug use at least once and this is an alarm that drug use should not be allowed to spread, especially among students

and young people. Unfortunately, there are no accurate statistics for the number of addicts in the country, but drug use, especially ecstasy pills and amphetamines, is clearly increasing in the country. At present, considering people using drugs for recreation, about 3,700,000 of them are permanent and dependent addicts. But in the same group there are 250,000 injecting addicts, among them between 5% and 20% are infected with AIDS (Fars News Agency)

- About 10 to 15 million people are engaged in addiction. Although there are no official statistics for addiction, the same implicit two million people statistic indicates that according to the people around addicts in the country, between 10 and 15 million people are involved in the problem of addiction, and unfortunately the volume of planning, informing and anti-drug advertising does not fit the dimensions of this ominous issue (Current head of the Welfare Organization)
- According to the research "Etiology and Epidemiology of Addiction in Tehrani Families" with the approach of "Investigating the Effects of Family Structure on Addictive Behaviour in Children", about 11% of the studied families in Tehran have some form of drug, stimulant, alcohol, psychotropic drug and tranquilizer abuse (Mohseni Tabrizi, 2005)
- In addiction survey research by the Office of Cultural Studies of the Ministry of Science, Research and Technology in the academic year of 2002-2003 on a sample of 5321 students in 21 universities under the Ministry of Science, Research and Technology, 586 students, i.e. 11% of students used drugs professionally (Azad University, Wikipedia site)
- According to the official statistics, there are 400,000 addicts in Tehran. Decrease in the age of drug use, especially the psychotropic drugs, is an alarm that should be considered. The decrease in the ugliness of drug use in the community has also reached its limit. Lack of public awareness of the dangers of narcotics is another problem that should be addressed (Greater Tehran Police Commander; December 2, 2010)
- Since street drugs are impure and always contain a lot of additives, with the prevalence of using these drugs, especially in the injection manner, we witness the increased deaths caused by their abuse; so that more than 3000 people have died from drug use in the past year. The addiction problem as one of the four major social harms in the society is the link between the other three problems, namely poverty, unemployment and divorce. The head of the Forensic Medicine Organization of the country suggests that according to the official statistics there are about 2 million addicts in the country and out of the 70 million population of Iran, 10 million

are directly affected by the problem of addiction. In the past 5 years, with the advent of industrial drugs, the pattern of drug use has also changed in the community to some extent from the use of traditional drugs such as opium, syrup and cannabis to the use of industrial drugs such as heroin, crack and glass, and from smoking and oral use to injection. Cannabis has been a traditional psychotropic drug, but with the advent of new psychotropic drugs in the last few decades, these compounds have been severely abused. Abuse of hallucinogenic drugs such as ecstasy, L.S.D., phencyclidine, and above all amphetamines reminds the tsunami of abuse of psychotropic drugs (Head of the Forensic Medicine Organization of the Country; November 30, 2010)

Ministry of Health: There is one addicted woman for every 8 addicted men (Ettelaat Newspaper; December 12, 2010)

A project was conducted by the Institute for Humanities and Social Studies of Academic Centre in 2011, entitled "The National Plan for the Epidemiology of Drug Abuse among Iranian Citizens" with the financial support of the Office of Drug Abuse Research and Training. The sample size was 15,000 households that from each household a member above 15 years old was interviewed. In this study, the prevalence rate for the population aged 15-64 was estimated 2.65% based on the 2006 census, which was 2.75% and 2.47% for urban and rural areas, respectively. The prevalence rate of drug use in the sample population for men and women was 90.7% and 9.3%, respectively. Drug users had mentioned their first use experience in a friend's home (28.46%) and their own home (22.28%), destroyed places (8.21%), parks (8.21%), dormitories (5%), alleys and streets (5.04%), educational environments (3.71%), workplace (3.71%), barracks (2.39%), prisons (0.27%) and no response (11.88%). The type of drugs used was opium (52.02%), glass (26.22%), crack or compact heroin (15.94%), heroin (9.77%), cannabis (6.43%), ecstasy (3.08%) and opium syrup (2.83%) (GhanbariBarzian & Dehghani, 2019).

In the following one of the epidemiological information of Iran is shown (see Figure 1.2).

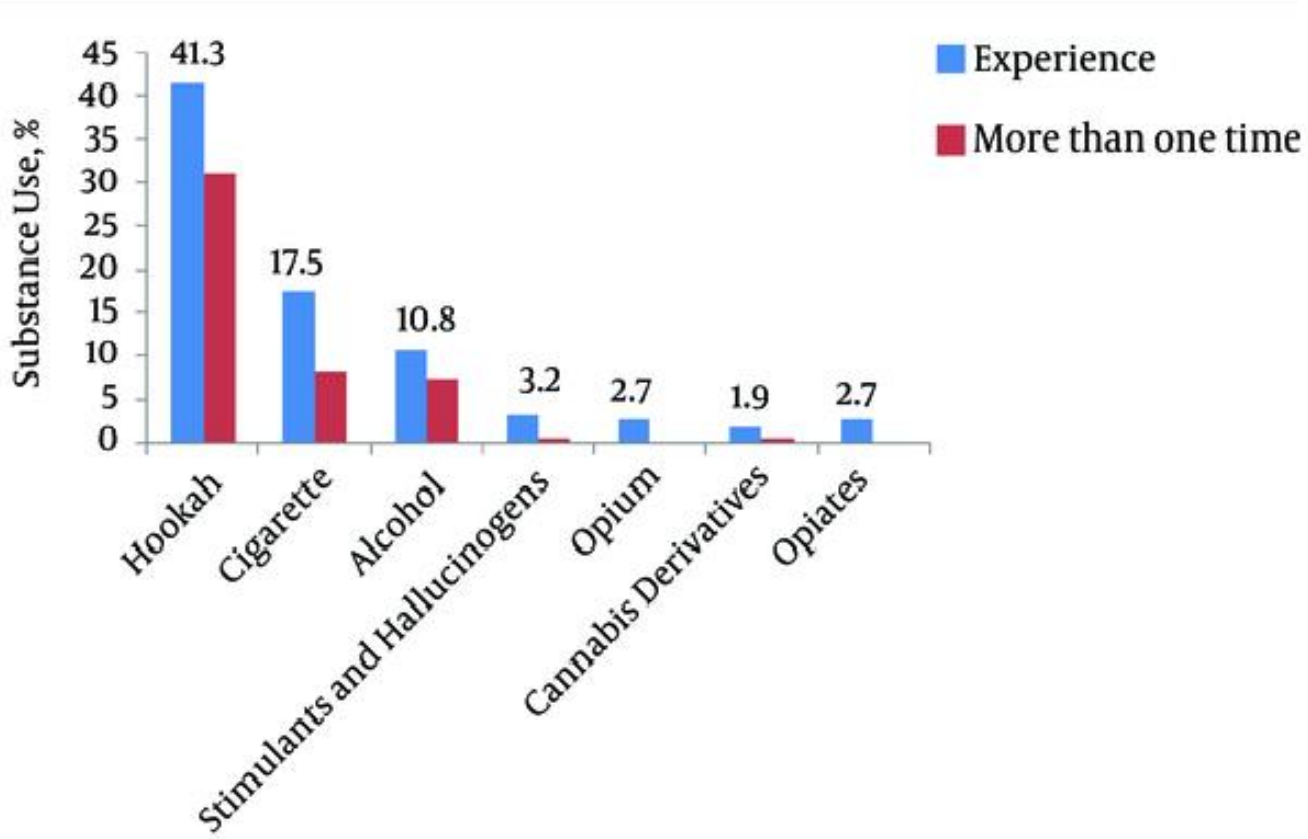

Figure 1.2 Epidemiological information of Iran[1]

1.4. Assertiveness

Assertiveness means protecting one's own rights and beliefs without violating of others' rights (Shiling, 2003; translated by Arian, 2003). Assertiveness is a behaviour that helps individuals maintain their own self-esteem while respecting others' rights and increase the probability of obtaining better results. Assertiveness and bravery are not synonyms. Joseph Wolpe (1993) describes the assertiveness as follows: Proper expression of any emotion to the other party without feeling anxious (Di Loreto, 2017). Therefore, the individuals who are passive or aggressive in interpersonal situations are considered appropriate for assertiveness training. Assertiveness training is considered as an alternative treatment for most stresses due to interpersonal interactions.

[1] https://ijpsychiatrybs.com/articles/3743.html

These individuals are through the best cases for assertiveness trainings: Those who are afraid to complain about a restaurant's bad service because they are worried of the waiter's feelings; those who cannot leave the boring social situations, because they are afraid to be considered ungrateful; those who cannot express their opinions because they are worried about whether others like them; Those who are afraid to tell professors or manifestations of power that they do not like to wait, because they are afraid that these manifestations of power become angry; those who cannot claim higher salary or higher scores because they feel humiliated; and those who cannot participate in competitive games due to fear of losing (Prochaska & Norcross, translated by Seyed Mohammadi, 2010).

Assertiveness increases equality between human beings and it allows them to take action in their favour and to stand up without anxiety unreasonably and express their feelings with honesty and imagination; it also allows them to get their rights without losing the rights of others (Alberti & Emmonz, translated by Gharechedaghi, 2012). In other words, self-confidence is a prerequisite for increasing assertiveness. I think people are at different levels of assertiveness. Some people have high assertiveness in certain situations, and not in other situations. So, having high self-confidence is necessary for increasing assertiveness in all situations of life (Zare & Khormaei, 2016).

Have you ever found it difficult to say no to those who wanted to impose their opinions on you in any way? Is your life control in the hands of others? Do you keep your desires and wants in your heart? Or, on the contrary, do you pressure others to achieve your desires? Do you act aggressively to claim your rights? For many people, situations are bothersome and disturbing, and they seek to take an appropriate action to save themselves. To solve these problems, we need to consider principles helping people build self-confidence and relationships with others. And one of these principles is having the ability to be assertive. By increasing equality in personal relationships, assertive behaviour enables the individual to stand up for himself/herself and to express his/her honest feelings without anxiety and stress as well as to achieve his/her rights without violating the others' rights. Problems such as headaches, general fatigue, gastrointestinal disorders, skin irritations and short breath may be due to the disability in assertiveness. With the help of assertiveness, you will be saved from these problems (San Martin, Sinaceur, Madi, Tompson, Maddux & Kitayama, 2018).

Accordingly, assertiveness means defending one's own rights and expressing one's own thoughts and feelings in a direct, honest and appropriate manner (Shiling, 2018). Assertive people respect themselves and others; they are not passive and do not allow others to abuse them and, on the other hand, respect others' wishes and needs and communicate with them in a thoughtful way (Podineh et al., 2016).

In one sentence, it can be said that assertiveness means individual's ability to express himself/herself and his/her own rights without violating others' rights. People having this skill are able to have high self-esteem and to develop a sense of respect for others, and it is under these conditions that mastering everyday situations and problems can be greatly facilitated. Of course, assertiveness, firmness, being assertive and even saying no are all somewhat similar, and all of them mean assertiveness (Bastani, 2016).

Assertiveness includes two basic skills

(A) The ability to say "no" when you want to say "no", and say "yes" when you want to say "yes". When we want to reject a demand of somebody, we must abide the four principles of brevity, clarity, solidity and honesty. The refusal response should be short and should start with the word "no", so that the message is not obscure and has no long explanation. The answer must also be honest, direct and solid. People in our community always have requests from others. One should be able to withstand and resist in simple process of "saying NO". If one cannot say "no" at the time they want to say "no", they will lose control of their lives (Fanheimers, et al., translated by Chini, 2011). Failure to say No has the following negative results (Liu, 2007):

- It leads you to the deeds that take your self-respect
- It prevents you from doing what you really want.
- Because you allow other people to permanently exploit you, these abuses of yourself are accumulated in you, and you may lose your mood in an inappropriate position after a lone time saying yes.
- Failure to say No often leads to a lack of respect, instead of creating affection of others towards us.
- This behaviour disconnects you and others. If individuals are not honest, they cannot understand each other. Saying "yes" when you mean "no," indicates lack of honesty.

(B) Demand and asking for something, expressing your feelings and thoughts, and dealing with humiliation are through the basic skills of assertiveness. Expressing emotions, an individual who wants to express assertiveness is not only ware of the emotional quality they want to express, but also they are aware of how it is expressed (Mojtaba & Keykha, 2011).

Emotional speech, which is “the continuous and proper expression of permanent and changeable states of a person’s emotions”, has the following characteristics:

- It’s stated to a specific person and for a specific purpose.
- It emphasizes the use of the Term "me" and the verb reflecting their feelings.
- It is simple and concise.
- It’s honest.
- It is appropriate (Fanheimers, Herbert & Baer., translated by Chini, 2011).

1.4.1. Generalities of assertiveness

1. Depending on the situation, reveal your communication as much as possible.
2. Try to express all your emotions; whether it's anger or love.
3. Act in a way that their love and respect to you increases.
4. Notice to what can be done in another way, not how the world should be (Ishigaki et al, 1996).
5. Do not misrepresent aggression and violation of others’ rights instead of assertiveness.
6. Aggression is an action against others, while assertiveness is a means of standing for your own.
7. If you cannot express yourself in a field, use the techniques that have succeeded in other situations (Dalir & Rasaneh, 2019).
8. Practice: say your words in non-essential affairs.
9. Act: as your actions change, your feelings and thoughts will change.
10. Beware that the assertiveness ability is not a permanent state. As you change, the living conditions change and you are faced with new issues, so you need new skills (Bolton, translated by Sohrabi & Hayatroshanayi, 2010).

There are three main obstacles barriers to assertiveness (Alberti & Emons, translated by Gharechedaghi, 2012):

- Many individuals deny the right to express themselves.
- Many individuals are afraid of expressing themselves.
- Many people do not have the necessary skills to provide assertiveness tools Individuals' rights in Assertiveness

There are always five fundamental rights:

- As long as you do not disturb anyone, you have the right to do anything.
- You have the right to maintain your worth and authority by assertiveness.
- You have the right to request others and they also have the right to answer you no (Waldron, 2017).
- You need to know that there are boundaries with others in which the rights of individuals are not completely clear, but you always have the right to discuss the matter with the person concerned to make it clear.
- You have the right to earn your rights (Bauries, 2010).

Other individuals rights include: the right to say "yes" or "not", the right to express feelings, the right to choose, the right to change, the right to freedom of expression, The right of ownership on the body, time and property, the right to have a positive attitude to oneself, the right to express oneself And wishes, the right to respect, the right to change the previous decision, the right to demand, the right to gain information and etc. (Fanheimers, Herbert & Baer., translated by Chini, 2011).

1.4.2. Attributes of individuals with assertiveness

A person with assertiveness has four outstanding features:

1. They are free in expressing their existence and assertiveness, and they show it with their words and deeds.

2. They communicate with all people at all levels. This connection is always explicit, direct, honest, and appropriate.

3. They have an active way of life; contrary to a passive person who is waiting for occurrences, they create happenings.

4. They act in a way that they deserve (Prochaska & Norcross, translated by Seyed Mohammadi, 2010).

Attack and Mutual Attack

Almost every episode of expression of assertiveness is experienced as an "attack," and in response to this encounter, there is always a "mutual attack". When facing the foreseeable defensive responses of others, one can achieve many successes through the process of assertiveness by following six steps:

1. Preparation: The first step is to preparation is writing an expression of assertiveness (or preparation) before it is sent.
2. Sending the assertiveness expressing message: Once the message is ready, an appointment is set, and there is enough time; the message can be sent.
3. Silence: after presenting an expressive tone of message which is associated with a proper body language, stop and keep quiet. Your silence allows the other person to think about your sayings and what is in your mind.
4. Reflective listening to Defensive Responses: When a message was delivered from an expression assertiveness and silence, a defensive answer will almost definitely appear from the audience. In this case, the most important point is to reflectively listen to the predictable defensive responses of the opposite side.
5. Repetition of process: due to defensive state of the opposite side, they may not have clearly understood the situation from your point of view, therefore repeat the same message again, be silence a bit, and then reflect the predicted defensive response.
6. Concentration on solution: One of the reasons for usefulness of assertiveness messages is that the other party is not forced or limited. They not only have to respond yes or no to our proposed solutions, but rather, they can think of a solution to meet their needs (Bolton, translated by Sohrabi & Hayatroshanayi, 2010).

1.4.3. History of assertiveness training evolution

The history of assertiveness education is rooted in behaviourist psychology, that is, in the works of Pavolov, Salter, Wolpe, and it was later advanced by people like Alberti, Emmondos, Lazarus, and Fensterheim. This phenomenon involves observing, separating, analysing and classifying behaviours based on self-expression and assertiveness. Subsequently, effective techniques for teaching these behaviours were evolved. Obviously, nobody has invented an attitude of self-expression or assertiveness, but rather, it has been part of human behaviour. In order to understand the history and evolution of assertiveness training, first we consider the theory of Russian physiologist Ivan Pavlov (1849-1939). Pavlov was the initiator of extensive research on the nature and function of nervous system. As a biologist, he was interested in ways that living creatures adapt to their environment. In more developed organisms, including humans, one way to do this is through the nervous system. As the environment changes, individuals also need to change, otherwise they may encounter some problems. In neural activities, Pavlov discovered and described two elements of excitation and inhibition. Excitation involves intense activity, including the ability to learn new responses. Inhibition is a process that reduces both activity and the ability to learn new responses (ReysShan-Gerahan, 1998, translated by Shahni Yeilagh, 2008). Andrew Salter wrote the classical work on behavioural therapy, entitled Treatment through Conditional Reflection (1949). Salter used the same concepts of excitation and inhibition, along with learning theory, used to describe effective treatment strategies for all kinds of disorders. The goal was to increase the stimulating behaviour of humans, which enables them to more effectively balance their environment and learn more effective methods of balancing. As a person expresses more assertiveness, the increase in stimulant behaviours leads to increased emotional excitement in them. In this theory, Salter did not use the term self-assertiveness (HajiHasani, ShafiAbadi, Pirsaghi, & Kianipour, 2012). Joseph Wolpe (1958) was the first person to use the term assertiveness in this field. Wolpe found out that one cannot experience two contradictory emotional states at once. Hence, one cannot be both anxious and calm. This principle is called bilateral inhabitation. Wolpe encouraged his clients to calm down and showed them the ways of dealing with anxiety stimulants. It was discovered that the effect of this work is far more than the method in which a person only tries to avoid anxiety. It's easier to try to be something, rather than trying not to be anything. This behavioural technique is called regular desensitization, which is used on fear treatments. Similarly, Wolpe indicated that, in anxious situations, acting bravely

inhibits the anxiety. Meanwhile, the patient discovers that in such situations, behaviour based on assertiveness is much easier. This is a very creative way of behaving. We do not fight with anxiety; we only act boldly and bravely, while surprisingly anxiety disappears (Rimm et al., 1994). Wolpe and Emmonz were impressed by the Karl Ragers humanistic approach and the behavioural techniques of Wolpe. They may claim to be among the first to present the assertiveness as a humanistic concept to help individuals obtain their rights (Bolton, translated by Sohrabi & Hayatroshanayi, 2010).

Wolpe & Lazarus (1966) emphasize the importance of self-esteem development as well as the inclusion of positive assertiveness as a part of assertiveness training (Omidi, Akbari & JadiAraei, 2011). Arnold Lazarus (1990) presented his extensive treatment behaviour, which includes humanistic and behavioural approaches. He considers the assertiveness as insistence on claiming rights. Meanwhile, He also accepts expression of love, emotions, satisfaction and other positive emotions as part of the emotional freedom in expressing feelings that can be learned. Therefore, there is currently no general definition of an assertive behaviour based on the general agreement. Hence, it is difficult to conduct researches on the effectiveness and theoretical basis of assertiveness training. In fact, different educators use very different ways in practice. Regardless of these theoretical differences, even if there was a general agreement on the definition of the criteria for expression-based behaviour, we did not yet know what behaviours have these criteria in particular situations. From the more pragmatic standpoint of self-expressionist educators, these theoretical considerations are less important. Although limiting the definition of self-assertiveness training could be desirable, it is not possible now. The fact that assertiveness has been accepted as well as advertising aspect and has been raised as a new response to many problems, has added to the complexity of this issue. This marketing practice, with its exaggerated claims, is disappointing when those unrealistic expectations are not met. It's natural that individuals defend themselves with enthusiasm about what they offer themselves, but the exaggeration of any type of education or treatment, especially in the field of psychology, is far from ethics (Shahni Yeilagh, 2004).

Courage can be good for everyone, but some people are not able to learn the techniques of assertiveness. Therefore, specific communication skills and a certain amount of self-esteem should be available to clients along with no anxiety (Putman, 2010), so the trainings can be conducted. Some people may also develop assertiveness techniques successfully, but they cannot use them

outside the educational environment. Our point of view is that such patients do not have problems in expressing, but their problems are more psychological. Education of assertiveness is often followed by trainings of other techniques for individuals' development, for instance:

1. Knowledge and ability in body language that results in the use of body language based therapies.
2. Learning role play and participating in psychodrama.
3. Awareness of other people's perception and participation in vulnerability groups.
4. Considering the situations in which a person does or doesn't have bold and brave behaviour, and using traditional psychotherapy (Mojtaba & Keykha, 2011).

Techniques that are taught in education of self-assertiveness are in the following areas:

1) Verbal communication
2) Non-verbal communication
3) Reduction and control of anxiety
4) Decrease, control and change of anger energy
5) Increase of self-esteem
6) Awareness of oneself and others in social situations
7) Awareness of social and cultural norms of behaviour

As we think it is more effective, these techniques can be trained by experts, either individually or in small groups (HajiHasani et al., 2012).

1.4.4. Rights and responsibility for self-assertiveness.

Educating by learning self-assertiveness behaviour implies that we have the right to do so. The claim of this statement represents the ethical point of view of our freedom and respect for us and others. The right to express one's assertiveness is a fundamental human right. Naturally, rights are along with responsibilities. We also know that our view of these basic human rights is partly based on our culture (Such & Walker, 2005). We accept responsibility for our free and humanistic views. A useful exercise for each person is to provide a list of self-assertiveness rights for themselves. In

some American books, this list is presented as a "Declaration of Rights", which is similar to the same legal notion as the American Basic Law (Mohammadi Kortalaei, Kamaei & Nikobakht, 2009).

Human Rights for assertiveness

In the Table 1.1 below human rights for assertiveness is given (Alexy, 2011).

Table 1.1 Human rights for assertiveness

1.	The right to do anything that is not incompatible with the rights of others
2.	The right to or not to express assertiveness.
3.	The right to freedom of choice
4.	The right to change
5.	The right to control body, time and property
6.	The right to express opinions and belief
7.	The right to think about oneself
8.	The right to make requests
9.	The right to express sexual desires
10.	The right to have needs and demands
11.	The right to fantasize
12.	The right to have information
13.	The right to receive goods with services whose money has been paid
14.	The right to be independent and to be free
15.	The right t to say “No”
16.	The right to be treated respectfully; let’s consider these rights of assertiveness in detail

1- The right to do anything that is not incompatible with the rights of others: this is a fundamental right that includes several other rights. It’s hard to believe that we have the right to act as we like and accept consequences to the extent that they do not harm the rights of others. Unfortunately, it is not clear what violates the rights of others, the qualitative perspectives of individuals in a society are constantly in a state of change, but when a general view does not come about for humans? There was a time when smoking in the UK was generally accepted. Now this behaviour is less tolerable because it violates the rights of others. If this behaviour is now a defect in the rights of others, then it was at that time too, so what has changed? (Alberti & Emons, translated by Gharechedaghi, 2012)

2- The right to or not to express assertiveness: assertiveness training allows you to communicate with the environment and others in a different way. We think this is a “better” way. "Better" because you make your life as you want it, we reach our goals and increase our self-esteem. We only recommend that there is no obligation in this matter. Is it your right to express or not to express in various situations you choose (Jalali & PourAhmadi, 2010).

3- The right to freedom of choice: When we do the very thing we want, we have done a daring and brave action. The way people perceive about themselves is different. Some feel that they are controlled by their environment, their past or economic conditions. All of these are important, but the choice of the syntax is the responsibility of the individual, and patient individuals act this way. If you are brave, you consider the conditions, but you do not consider them as controllers and you take on the responsible for your own life (Alberti & Emons, translated by Gharechedaghi, 2012).

4- The right to change: People often urge us to change, and in particular, they refer to aspects of behaviour that they do not like in us and can be corrected. However, when we change through education, choosing a new job, changing our place of residence, or finding insight through psychotherapy or spiritual exercises, we may face considerable resistance from the very people who changed us first. The resistance of others towards our change often occurs when we are trained to express assertiveness. Your friends and relatives may criticize your "new schema" and tell you that your new personality is not well-liked. Fortunately, one of the special subjects in teachings of expressing assertiveness is the techniques to deal with these types of negativities (MardaniHamoleh & Heidari, 2010).

5- The right to control body, time and property: Individuals are different in physical shapes and sizes, as well as their skin and hair colour. Some of these features are congenital while others represent our lifestyle. We certainly have the right to change our body, for example, by lifestyle, diet and exercise. Our control is ours, not others. Similarly, we have the right to spend our time how we want, unlike the advice of friends and relatives who order us what to do. We have the right to spend our time as we like. Asset control, at first glance, is an accepted right in materialistic societies. The idea changes when our friends want to borrow us, books, tapes or cars, and our relatives protest our forgiveness; this money is morally their right in their belief (Jalali & Pourahmadi, 2010).

6- The right to express opinions: When you were a child, have you ever been told, "You should not say that in front of ...." or "If you think this way you are foolish "? Our childhood point of view may have been so simple or very unpleasantly correct for adults. Many of us in adult life still kept those negative messages in mind, so we are afraid of expressing our opinions where we are considered stupid, or where others may underestimate us. We may even be suspicious of the truth which we can have ideas and opinions at the same time, but being human means to have an opinions and thoughts. In our belief, to express a certain belief or opinion is in the human nature and it's the human right to do so (Alberti & Emons, translated by Gharechedaghi, 2012).

7- The Right to think about yourself: If you do not think well about yourself, why should you expect others to think about you this way? Often, we want to be endorsed by others about our actions or points of views before we do these ourselves. It is good to learn to make assessment of ourselves and to believe in this self-assessment. In spite of the opposite messages we may have received in childhood, it is in fact our right to think about ourselves (MardaniHamoleh & Heidari, 2010).

8- The right to make requests: "Coward people will never reach their goals." If you do not speak about what you want, then you will not get a chance to achieve it. It is not fair to expect others to read our thoughts and give us what we want, as we cannot read the thoughts of others; maybe they like to meet our demands. If we have low self-esteem and we are afraid to ask, we have sacrificed our growth for our sense of security. We do have the right to request what we want (Jalali & Pourahmadi, 2010).

9- The right to express sexual desires: Everyone has the right to legitimately pursue their sexual desires (MardaniHamoleh & Heidari, 2010).

10- The right to have needs and desires: This means that we allow ourselves to have what we really love. We want and accept what we need. If the individuals who usually prioritize the wishes of others understand that they also have needs and aspirations that are as important as the needs and aspirations of others, they have taken a major step towards the acquisition of individual freedom (Hamule & Heidari, 2010).

11- The right to fantasize: Many of us are able to distinguish between imagination and reality. Life in the world of fantasy means avoiding reality and replacing the real world with the unreal one, but eliminating imagination means depriving yourself of a huge creative force and a pleasure. We have the right to enjoy our imagination (Jalali & Pourahmadi, 2010).

12- The right to have information: Making the right decisions requires information to create our life. Information about ourselves may be obtained from a medical, social, school, university report, or also from sources of employment. This information is basically based on the opinions of others with varying degrees of expertise and objectivity. In addition, we need other information, such as health issues, the effects and safety of drugs and contraception, as well as the need for consumer products and foodstuffs (Alberti & Emons, translated by Gharechedaghi, 2012).

13- The right to receive goods or services whose money has been paid: This seems to be evident, although consumer experience shows that a small number of goods and services manufacturers really do not believe that their customers deserve to receive what they cost. Many people have difficulty expressing themselves in this area. As a result, this is one of the topics that often arise in self-assertiveness trainings (Albert & Emmonz, translated by Gharechedaghi, 2012).

14- The right to be independent and to be free: This requires that a person chooses his or her own career and career path and to be free to choose whether to marry or not. This right especially entails the preservation of our individuality in confronting the pressure of ta group to co-operate. Also, the person has the right to avoid answering the door alarm the phone. Finally, if they wish, they have the right to spend their time on just walking, praying and meditating (Mardani Hamoleh & Heidari, 2010).

15- The right to say "no": Failure to say no is one of the most common problems encountered by people lacking courage. Telling people no, when it comes to saying, is a very positive and necessary skill. If we have n always said yes rather than saying no, but we have said, we have underestimated ourselves and our self-esteem. As far as we may even ask ourselves, do I have any right to say no? If we do say no, we have shown ourselves right to others. As a result, we have made a mistake and have not respected ourselves along with others (Jalali & Pourahmadi, 2010).

16- The right to be treated respectfully: This means that we are treated like a human being, not an object; we all deserve to receive respect from others, but sometimes it is necessary to inform them of this fact. Usually, people treat us as we expect them to do so. As a person, we have the right to be respected regardless of race, gender, sexual orientation, social class, religion, profession, wealth, or other factors that humans have created to make distinguishes (Jalali & Pourahmadi, 2010).

1.4.5. Behavioural and personality characteristics of assertiveness.

Despite the existing different psychological and philosophical approaches to the process of assertiveness concept, evaluation, training, and treatment, it can be said that there is little difference in describing the characteristics of assertive behaviour among researchers. They often emphasize behaviours such as expressing feelings without anxiety, having various behaviours, frankness, rejecting irrational demands, the ability to say no, accepting self-praise, expressing rational interest, responsibility, mutual respect, respect for human dignity, audience, wanting human rights for self and others, and avoiding compliments. Then, the assertive person is someone who criticizes and accepts criticisms, avoids any dependent and following behaviour while maintaining his/her independence, has behavioural stability in social behaviours and does not hesitate to act and make decisions, behaves with confidence and mutual trust in the interpersonal relationships, behaves consistently while being active and efficient in these relationships, has positive feelings about himself/herself and others, respects his/her and others' will and right to choose, has independent opinions, thoughts and beliefs, doesn't fear to accept his/her mistakes and apologize for them and supports others for doing positive things. Moreover, in dealing with new situations and unexpected issues, he/she act creatively and flexibly, and for whom, maintaining mutual respect in social relationships, irrespective of the audience's position, is always the main criterion for communicative behaviour (Shamloo, 2015).

Assertiveness is the essence of interpersonal behaviours, the key to establishing a human relationship with others and a way to express oneself in an explicit, direct and appropriate manner. But some people have not learned assertive behaviours and don't have the power to say no and cannot interact with those around them assertively. Such individuals experience feelings of guilt, mistrust, and submission in their social relationships with others and exhibit fear, anxiety, and

depression in their behaviour. As such, it is observed that self-acceptance and self-esteem are poor in these individuals. These individuals may sometimes exhibit compromised, aggressive, and harassing behaviours (Bambara et al., 2018).

One of the problems faced by people being low assertive is that they do not tend to express their emotions, thoughts, and behaviours, and this can be attributed to the subconscious fear that others may not approve their behaviour and emotions and even if they express their behaviour, thoughts, and feelings, they will not reveal the reality to them, but only seek to empower others. This can cause other problems such as the inability to communicate properly with others, the inability to make decisions, and the inability to express emotions. The need for bonding is one of the characteristics of the less assertive people.

Decker (2018) believed that assertive behaviour is to express any feeling but anxiety appropriately. He thought that to reduce social anxiety and uncertainty, training individuals to use the opposing behaviours is necessary. For him, assertive behaviour is inconsistent with anxiety. For this reason, if one exists, the other will disappear. Assertive behaviour leads to the formation of self-confidence, self-esteem and self-respect (Mosavizadeh, 2016). Volpe believes that many abnormal behaviours are associated with resistance. So, people need to be encouraged to break through the resistance and be able to express face-to-face and verbally. He also believes that three factors hinder expressing assertive behaviour (Dobson, 2014):

1. Family parenting: Families that do not give their children independence and do not have rights for them, nurture children who are not capable of expressing their true emotions and feelings and are isolated and passive in the community. Such people will not be able to exhibit assertive behaviours, and this feature will expose them to many social, communication, and occupational problems.

2. Fear of endangering social status: Some people refuse to be assertive because of the loss of their social status and their relationships with those around them.

3. Not understanding the difference between aggression and assertiveness: Some behaviours are considered abnormal if they occur more or less in the behaviour repertoire. Volpe believes that assertiveness or assertive behaviour is a positive emotional expression in the social

environment. Researchers place the assertive behaviour between the two poles of submission (passivity) and aggression (Mosavizadeh, 2016).

According to Lazarus (2006), assertive behaviour is a way of claiming the rights and can improve the inappropriate relationships of individuals. Lazarus believed that four types of responses should be taught to clients: rejecting requests, loving others and making your own requests, expressing the positive and negative emotions and beginning, continuing and ending conversations (Haruji et al., 2015).

So if a person shows a behaviour with the above four criteria, it is said that he or she has assertive behaviour. Lazarus believes that the postures and gestures of passive people are such that they tend to sit more on the edge of the chair, make their bodies more submissive, and their facial expressions, imitations, and tone of voice also make the listener aware of their passive state. Also, the content of their speech is such that either the first or the last sentence is deleted or their sentences are meaningless. For the first time when they encounter someone, they are unable to give an appropriate emotional response (Mosavizadeh, 2016).

Janssen, Eisenbach, Ehrmann & Vogel (2018) regard the assertiveness skill as "demanding one's own right and expressing thoughts, feelings and beliefs in a proper, direct and honest way" so that the rights of others are not violated. The way to communicate with others is an important factor in social interaction. Poor communication can lead to unhealthy relationships and increase psychological stress. One of the important factors in interpersonal communication is the correct use of assertiveness skill. Poor assertiveness can cause many problems for both oneself and others. Thus, assertiveness training is a structured intervention approach used to improve the effectiveness of social relationships. It is also used to treat anxiety disorders and phobias of children, adolescents and adults. An assertive person can make a close relationship with others, avoid abuse and express a wide range of positive and negative needs and thoughts without feeling guilty or anxious or hurting others' rights (Bastani, 2016). The purpose of the program and assertiveness training in traditional way is to help people understand the theoretical concepts of assertiveness and apply its related skills. By learning about different types of behaviour, people learn to feel responsible for choosing their behaviour. This means that if, for example, a person behaves indecisively or aggressively in a certain situation, he or she should be aware of and accept responsibility for his or her choice (Chang, 2019). In assertiveness training, one learns how to behave boldly and

assertively. Attempting to identify and define the problem, pursue the intended goals (always with assertiveness), repeat role-play, reverse role, and gradually and sequentially provide the desired behaviours, he/she learns the appropriate assertiveness-based ways of expressing his/her desires. Assertive behaviour is correlated with positive self-concept, self-esteem, mastery, self-efficacy, self-confidence, and co-dependency and convergence. The non-assertive behaviours are inhibitory and avoidant, and are highly correlated with fears, panics, social anxiety and various types of internal aggression. Numerous studies have been conducted on the use of assertiveness training as a therapeutic approach. For example, Yaghobi (1998), in his study, demonstrated that assertiveness training through group role-playing is effective in improving social skills. Ghafarianzadeh (2000) also reported the positive impact of assertiveness training on academic achievement and social skills of the junior high school and high school female students in Tehran's 14th district. Also, in their study of first year male students in Ahvaz high schools, Neisi and Shahiniyeylagh (2001) found that assertiveness training increases self-esteem and mental health, and decreases anxiety. In addition, a study by Rahimi, Haghighi, MehrabiZadeh, & Bashlideh (2006) in Shiraz also showed that assertiveness skill training leads to reduced social anxiety and increased social skills such as self-assertion. The study found that school counselling cores play an important role in improving students' social and academic performance, and counsellors can teach students the healthy assertiveness and thereby prevent some behavioural disorders and academic problems.

Research by Speed, Goldstein & Goldfried (2018) on the effectiveness of assertiveness training has proven its efficiency in reducing anxiety and improving academic achievement. On the other hand, some studies show that the lack of assertiveness skill in adolescents causes aggression in their interpersonal relationships. Therefore, since this skill is learned, it can be used after learning in interpersonal relationships.

The results of another research by Gultekin et al. (2018) indicate that group therapy-based assertiveness training reduces aggression, which is consistent with the results of Decker (2018), Janssen et al. (2018), and Bambara et al. (2018). Hughes et al. (2019), on the other hand, have illustrated that social skills training, especially assertiveness training, has an effective role in controlling impulses of anger and aggressive behaviour. Some studies also suggest that assertiveness skills can gradually eliminate phobia (Yoshinaga et al., 2018).

Apart from describing and explaining the mentioned behaviour and personality characteristics of the assertive person, since the assertiveness is essentially studied in a social context, most scholars also agree on its relativity. The behaviour, gender of the audience, and the culture in which interpersonal communication takes place will vary. Neither an identical and certain behaviour in all situations can represent the assertiveness trait, nor can the individual in all situations conduct the same assertive behaviour, nor is there an absolute and identical definition of assertiveness in all cultures. Renger (2018) and Morgan (2018) believe that the effectiveness of behaviour depends on the situation in which the behaviour is conducted. One may behave assertively in refusing the unreasonable request and may begin to speak or communicate with the other non-assertive person. Kolb (2018) suggests that the ability to conduct assertive behaviours varies depending on the audience and his/her gender. Also, according to Turcsanyi (2018), in Chinese culture, the demand for change in the behaviour of others is considered aggressive, and humility and tolerance are considered as assertive behaviour.

1.4.6. Advantages of assertiveness.

One of the most important things about assertive people is that they love themselves and respect their personality. They are in a better status than the aggressive or submissive people because they have good and positive feelings about themselves (Shoarinezhad, 2016). Assertiveness is not the only factor making one feel self-worth, but in the claims of the psychiatrist Herbert Fanheimers, there is a great reality that says: Your assertiveness extent will determine your self-esteem level (Shamloo, 2015).

The second advantage of assertiveness is the enhancement of good and desirable relationships with others. Assertiveness conveys a lot of positive energy to others. An assertive person is "able to see, hear, and interact with others because he or she has less concern by avoiding the feeling of embarrassment and anxiety, and need to protect himself/herself or control others arouses him/her less. The best and healthiest intimate relationships are between two assertive individuals. Intimacy means the ability to repeatedly express the deepest desires, hopes, fears, anxieties, and feelings of guilt to someone important in one's life. This type of disclosure or enlightenment is a kind of assertive behaviour (Abolghasemi et al., 2010).

When the assertive person realizes that he can meet his/her needs and defend himself/herself, he no longer comes close to others in fear of being harmed and violated. One of the biggest advantages of assertiveness is that one lives in the way he or she loves. When you give others the opportunity to know what you want and that you strive to achieve their rights and desires, your chance of achieving what you want in life greatly increases. It should be noted that one of the main reasons for the attraction of training is its productive assertiveness training (Mazlom et al., 2015). For example, a study by the University of Missouri on the value of some assertiveness training programs showed that 85 percent of participants had made many changes in their lives as a result of training in this field. Six or seven months after our training, a similar percentage of participants stated that they could maintain or enhance their assertiveness skills. Clearly, there are important qualitative differences between different assertiveness programs (McBride, 2017). But one of the main reasons for the popularity of assertiveness training is its 100% implementation such that it is immediately applicable to most people and is associated with a high degree of success. The assertiveness skill serves several purposes depending on the situation:

1. Preventing the violation of personal and social rights
2. Rejecting the irrational request of others
3. Making reasonable requests from others
4. Treating appropriately in dealing with unreasonable oppositions from others
5. Recognizing the rights of others
6. Changing the behaviour of others towards yourself
7. Avoiding aggressive behaviour
8. Expressing your position with high self-confidence and freely in any way.

It must have happened many times that you were placed in a situation where you received a request from somebody but you disagreed. Someone asks you to take alcohol or drugs. Assertiveness helps you reasonably reject these requests. In addition, assertiveness is also helpful in the following situations: reasonably requesting from others, properly dealing with others' opposition, avoiding unnecessary aggressive conflicts and declaring your position in collective decisions (Hosseinkhanzadeh, 2016).

1.5. Psychological Hardiness

Researches of Kobasa (1979), Holmes & Rahe (1976) and many others over the past years have shown that stressful events are effective in the development of physical and mental illnesses. Today, most researchers confirm the role of stress as a factor in the frequent and prolonged physiological excitation that leads to illness (Friedman & Boot-Koli, 1987; cited by Ghorbani, 1995).

In recent decades, many questionnaires have been published in public journals for measuring stress, and they declare a warning to readers who receive a high score in these questionnaires that if they are not willing to become ill, they should avoid dealing with stressful situations; but, on the other hand, changing the conditions of life as a stressful event is usually consistent with the potential for a better life.

A person living in a modern society may lose the opportunity to have a more productive life by avoiding many life changes. Therefore, advice to avoid stress in many situations may lead to a recession in one's life. Meanwhile, in studies that examined the relationship between stress and illness, the range of such correlations has been widespread (Ghorbani, 2006).

In some of these studies, there is a high correlation between stress and disease, and in others, in spite of significance; this correlation has not been strong. Such a wide range of correlations implies the existence of moderating variables and individual differences in the relationship between stress and disease. In other words, there are people who do not get sick, while they are in stressful situations. The question now is what variables do have a moderating role in this connection? Do stressful people have a stronger genetic and physical structure? Do they have more income and education? Do they benefit from more social support? Do they exercise and follow a decent diet? And do they have a distinct personality that affects their comprehension, interpretation, and coping with stress?

The results of Kobasa's research (1979) indicate that psychological stresses are in relation to diseases. He found out that the individuals who experience a high degree of stress without a disease have a different personality structure than those who become sick in stressful situations. Kobasa, (1982, a) introduced this personality distinction in a structure called "Hardiness". The conceptual roots of this structure are based on a set of personality structures that Maddi and Kobasa (1979)

call evolutionary theories (Kiamarsi, Najarian, and & MehrabizadehHonarmand, 1998). Kobasa (1995) defines Hardiness as the combination of beliefs about oneself and the world, which consists of three components of commitment, control, and struggle, using theories of existentialism in personality (Ghorbani, 2009).

Definition of Hardiness.

Using personality theories, Kobasa, Maddi & Kohen (1982), defined the hardiness structures as a set of personality traits that serve as a source of resistance in facing with stressful life events. This personality variable consists of three components (which are dependent on each other), including control, commitment and challenge. Controlling is the opposite concept of a threat or fear. The hardy people are those who feel committed to actions and behaviour and they believe that life events are controllable and predictable, and finally they believe that changes in life and the need to adapt to them is a new chance to struggle for more growth and development (Feyzi et al., 2011).

1.5.1. Hardiness Components.

As stated, from Kobasa's (1979) view, hardiness consists of three components of commitment, control, and challenge which are related to each other. According to Karor's (1989) research in initial hardiness studies, these components are first analysed separately, but in later studies, the combination and integration of these three components was analysed into a structure (commitment, control and challenge). The hardiness analysis has expanded as a general structure of commitment, control, and challenge, since, according to Karor (1989), data analysis, and evaluation as well as the interpretation of findings, are simply carried out this way. This hardiness and the method of reviewing the findings even expanded on short forms and scales of hardiness. Since hardiness has one or more components, the use of factors analysis to provide the components is very important. Through the factor analysis method, researches by Funk (1992), Mcniel, Kozma, Stone, and Hanna (1986) revealed three basic components of hardiness analysis, including commitment, control, and challenge (Naderi and Hosseini, 2010).

Control component.

It's simply the belief that a person is capable of controlling or influencing events. A person with a high degree of control has a belief in controlling their future and destiny. These people are able to

influence various life events. By using knowledge, skill, and power, they can predict and control the events of life, and thus, in the face of problems, they can rely more heavily on their responsibilities, rather than on the responsibility of others (Kobasa, 1995).

Averill (1973) explained his experimental observations on the inability to accept stressful stimuli by some organs. The three mentioned abilities below are required:

A. Decision control: the ability to choose the right variables among various variables to manage stress in the situation.

B: Cognitive Control: The ability to interpret the assessment and uniformity of various types of stressful events that leads to a person's vulnerability in lifetime.

C: skills of coping: appropriate responses to stress, which increase personality motivation to control stressful situations (Kobasa, 1995).

Commitment Component.

Committed individuals feel committed to their surroundings, engage themselves fully in their activities, and interpret life events as meaningful experiences. These people believe in the importance and value of their own activities, and they can find meaning for what they do. They also ensure their ability to change life experiences in an interesting and meaningful direction. As a result, instead of escaping the problems of life, with its many aspects, such as occupation, family and interpersonal relationships, they are completely merged. Committed individuals, affected by this belief system, can overcame stressful fears and reduce stress (Waller, 2015).

When needed to adapt, the committed individuals are aware of themselves and the ability to seek help from others (Klein, 2017). Although commitment to all areas of life such as occupation, social institutions, interpersonal relationships, and family causes stress in people's lives and illness, but commitment in life is an important basis for maintaining health in aspects of life. Maintaining health under stress depends on the power of commitment in people. The ability to diagnose for differentiating values, goals, and appreciation for proper decision making in stressful situations leads to a balance in the lives of committed individuals (Naderi & Hosseini, 2010).

Challenge Component.

This component points out that change in life is natural, the people who consider life as a challenge consider the various changes in life and the need for adaptation as an opportunity to learn and grow, rather than a threat to security and comfort in their lives. These individuals believe that satisfaction is gained through continuous growth, not in comfort, security, and everyday life. Such a belief creates the cognitive flexibility and the power to tolerate events and stressful situations of life, because they regard abnormal and unexpected events as interesting and valuable experiences. Individuals with challenge component seek to look for changes in their lives (Veisi et al., 2012).

1.5.2. Hardiness and other personality structures

Another category of studies has looked at the relationship between hardiness and other personality traits. In this area, the focus is on the relationship between hardiness and the type A personality, the reason for this apparent is the similarity of this relationship to each other and their different effects on health and disease. Type A is composed of major dimensions of overwhelming feeling of time constraints, intense competition, endeavouring to progress, hostility and aggression (Janisse, 1988). Some studies have shown that type A plays a major role in the development of heart diseases (Friedman & Boot-Coli, 1987). Both hardiness and type A structures emphasize the concepts of goal-seeking and cross-linking (especially occupational), while hardiness is a factor in reducing disease and type A is the cause of disease (especially coronary artery disease) (Eschleman et al., 2010). In their study, Kobasa et al. (1983) confirmed the lack of an empirical relationship between hardiness and type A. Their results showed that, in case of type A subjects, if the hardiness is high, the negative effects of type A on health are reduced (Sarafino 1998). Howard et al. (1975) also collected information over a two-year period from 217 men, with an average age of 44, to see if it was possible to simultaneously categorize type a members as hardy characters. In this study, biochemical reactions in the face of occupational stress were considered as hardiness criteria. The range of correlations was less than 0.3, and in some studies it was much lower (cited by Bayazi, 2007).

In a study of type A and hardiness, Rodovalt and Agostiss dottier (1984) indicated that hardiness has an inverse correlation with psychological distress, while type A has a positive correlation with psychological distress. In this research, the individuals of type A who were not hardy were

exposed to psychological distress. In his study like Kobasa et al. (1983), Nowack (1986) also showed that hardiness and type A are two independent structures, and there is no empirical relationship between them. In this study, Type A was consistent with “Burnout” and psychological distress. In a study on women, Schmidbauer (1982) and Nanko (1990)) also showed that there was no interactive effect between Type A and hardiness (Ghorbani, 2009).

In explaining the lack of relation between type A and hardiness, Kobasa et al. (1983) state that contrary to some apparent similarities between these two structures, the basic hardiness is the basis internal motivation and type A is the basis for external motivation. On the basis of this subject, if we consider the internal and external motivations as a continuum, moving towards one side of the continuum, which is ultimately internal or external, moves us away from the other side of the continuum; In fact, it turns out that the explanation for lack of relationship of Hardiness and Type A also suggests the inverse relationship between these two structures. Additionally, Maddi (1990) also explains this irrelevance as: ".... Confusion and hostility in type A is the opposite sense of commitment and control in Hardiness", While expressing the concept of "contradictory" aspects, it is more likely to denote the inverse relationship between these two terms than their irrelevance (cited by Kiamarsi, 1997).

Another interesting research by Sulommon et al. was a study of the hardiness and lifespan of patients with AIDS. In this study, the information was gathered on the psychological, social, behavioural, pharmacological and immunological status of 21 AIDS patients. Then the patients completed a self-report scale. After a while, eleven of these patients passed away, while ten were still alive. By comparing the responses collected by the two groups, the researcher concluded that hardiness is even effective on the life span (Shirbim et al., 2009).

Compositional structure of hardiness components.

Articles of hardiness scales raise the question of whether control, commitment and challenge are examined in a compositional and general structure or a separated one. Although it is possible to use the separation structure of the components in hardiness, it is also possible to use a more robust logic when considering the complex and compound structure of hardiness in theoretical concepts. If a researcher has subjects with high hardiness and low stress, or subjects with low hardiness and high stress, this difference in personality can be attributed to the way in which these components are combined with each other in personality of the subjects (Karor, 2011, cited by Kharazi, 2006).

Hardiness should be used as a composite structure; the advantage of using the composite structure of hardiness components appears when it comes to putting hardiness components into two-sided and obscure concepts in individuals' personality. In other words, when a specific operational definition for hardiness concepts and components cannot be described in the research topic, the advantage of using a general composite structure in a person's personality is more appropriate.

Another aspect of the assessment of the composite structure is the comparison of the power of correlation with independent dimensions to the components of commitment, control and challenge (Karor, 2011, cited by Kharazi, 2006).

It is important how to combine the components of commitment, control and challenge with each other. However, finally, the structure distribution of components in the test groups was divided into the two high and low hardiness levels. In other words, in a person's hardiness assessment, a high-hardy person has three components of commitment, control, and challenge appropriately. Of course, the appropriateness is assessed in the way that these traits are combined and distributed in the personality of each other.

The subjects are classified as high and low hardiness in experimental tests, while their abilities are tested empirically. Therefore, the people with high hardiness have the ability to cope better with mental pressure in empirical tests. According to Maddi and Kobasa (2009), hardy people tend to be more likely to cope with stressful situations in shorter time periods than those with a low level of hardiness who are less likely to cope with stressful situations (Mostaghni & Sarvqhad, 2012).

Hardy people's capabilities.

Studies by Kobasa (2009) have indicated that hardy individuals have the following characteristics: **1.** they challenge with their negative aspects and their lives. They have high self-esteem and more emphasis on positive events rather than negative events. **2.** They do not ignore the importance of problems, actively face their own problems, and try to solve it. **3.** They believe that they will be rewarded personally and through their actions, not that their rewards are not their own right and credit. In other words, they have intrinsic control. **4.** They have a clear and explicit value system and believe that their lives are meaningful. Victor Frankl also acknowledged this point. **5.** They are socially skilled people and have strong family and friendly networks, so that they can refer to them during a time of trouble (Sapington, translated by Hosseinshahi, 2011).

Many researches have been conducted on positive effects of optimism on thoughts, feelings and behaviour. Optimism makes our information more efficient, increases our self-esteem, and gives us more control over our surroundings.

Optimists consider bad occurrences as having external, unstable and distinct factors, while pessimists refer to internal, stable, and general causes, the same point that Seligman regards as the cause of depression (Santrock, Firuzbakht, 2010).

It seems that hardy people have a particular inner attitude that approach helps them to apply a particular way to deal with their own life and their surroundings. Hardy people often find life events interesting, diverse, informative and challenging. They consider life events to be realistic or somewhat ambitious, and therefore they are more optimistic about all life events. Perhaps optimism is the very reason that has made the hardy people more resistant to unpleasant and unexpected incidents (Ghorbani, 2006).

The results of research of Kobasa et al (1983) show that hardiness effects are manifested in two stages: first, a hardy person makes a positive interpretation of events, in other words, a hardy and non-hardy person may receive both the same level of stress, while the hardy person calls it a threatening and disgraceful event; second, the hardy person uses useful coping methods, such as problem solving skills and social supports. Various studies have emphasized the claims of Kobasa (Lipa, 1994). Kozaka (2007) believes that hardiness is an individual's desire to communicate with others and the surrounding world. It's not a process of stress or endurance, but it's to resist and flourish in difficult situations. And this is not like a reckless attack, it is the ability to perceive the surrounding environment and its ability to be evaluated (Feizi, 2011).

Hardy individuals accept their thoughts and feelings; they actively experience changing what they do not want. They welcome life and are emotionally busy with what's going on right now, and they are focused even when they rest. They consider themselves responsible for their own destiny and equally responsible for their health, their thinking, their feelings and their behaviour; they are responsible for the actual acceptance of the results of their actions, which requires their success or failure without sacrificing their self-esteem and consider giving feedback as an opportunity to learn and resist (Schafer & Bolurchi, 2010).

1.5.3. Other aspects involved in the hardiness.

Due to the fact that a hardiness habit can resist people against life problems, this question is naturally raised that how valuable and trainable is this attribute? Has hardness, like many other traits, a biological root or is it formed by family interaction and cultural values? This point is important because it can be used to improve one's ability to withstand psychological stresses. Maddi and Olet stated some useful information in this regard. They came up with the results that, considering past experiences of individuals, hardiness is a primarily an acquisitive feature, and the existing surveys suggest that a sense of commitment grows in families that their children are protected in the process of interacting with their parents, naturally, children try to meet their emotional and cognitive needs in different titles (Bayazi, 2007).

When parents encourage such children's efforts to confirm them, children, in turn, see themselves and the world around them valued. On the contrary, when parents consider such needs negligent or desperate, their children get deprived of value. In some cases, parents may restrict the possibility of assertiveness by imposing predetermined expectations, in that situation, instead of expressing natural and spontaneous behaviours, children will resort to actions primarily aimed at obtaining approval from parents. This situation paves the way for increasing the sense of alienation that is the opposite of the sense of commitment (Hall, 1986). The feeling of mastery and control is rooted in family experiences. If individuals feel competent in their childhood and adolescence, they will have a sense of control over their environment when they are in adulthood. If children cannot effectively apply their own will, they will have a sense of disability or even helplessness; For instance, exercising even activities such as cycling or group games can all be effective in creating a sense of control over the environment. When children fail in such activities, they will have a sense of lack of control and disability. It should be noted that if the expected assignments are too simple due to the child's age, children will feel responsible even if they are resolved. If the expected assignments are too difficult, children in such circumstances will feel disadvantaged and fail to perform their assignments. Thus, assignment to children should be compatible with age and abilities in terms of difficulty level (Maddi, 2010).

In addition to Kobasa and Maddi (1977), other psychologists have tried to reinforce the recommendations for formation and growth of this trait in families.

Four of their recommendations are presented below:

1. Make the children exposed to diverse and rich experiences.
2. Apply a reasonable limitation to your children and make their life meaningful, considering your own experience in life.
3. Treat your children as loving, respectful, growing, and prosperous human beings.
4. Teach your children the value of symbolism, analytical skills, and the use of decisive judgments, and be a useful pattern for them (Feyzi, 2011).

Defensive Mechanisms in Hardiness

There are some individuals who have the most resistance to problems. Those who encounter don't harm their mental and physical health even in major stressful events. This feature is called resistance. Kobasa et al. (2010) point out that hardiness is related to the tendency to receive potentially life-threatening events in a less threatening manner. The findings show that hardy people experience life events similar to those who are not hardy, but they rate these events as non-stressful, and they are optimistic about their abilities (Kobasa & Kohen, 2011). 600 staff members in an organization, including management and mentoring staff were asked to describe all stressful events and illnesses in the last 3 years in a questionnaire. Two groups were selected; the first group had more than average scores in terms of both psychological and disease severity. The results showed that people with low diseases were different in three dimensions from those who were ill. They have been struggling in their work and social life, they have been challenging to make more change and efforts, and they have had more events in their control and skills (Kobasa, Maddi & Zola, 2010; cited by Ghorbani, 2011).

Using defence mechanisms can have an important impact on health and personal well-being. In the theory of psychoanalysis, the defence mechanism is a process to protect consciousness of the person from anxiety by distorting or denying the reality (Sterling, 2019). The individuals who use mechanisms such as reverberation, prediction, joy, and altruism have better health and more control over stressors than those who use less sophisticated defences. They are somewhat hardier. Prediction is a mechanism in which one can predict their own problems and issues and prioritize their solution. In the mechanism of altruism, the individual avoids their problems by helping others, and serving and promoting others constructively, which brings satisfaction promptly;

therefore, the person is happy with the positive reaction of others and experience good feelings. Wit increases the interesting and humorous aspects of the stressful factor and conflicts of deviation from seriousness, and creates a positive space (Zare, 2010).

In a more precise explanation of the protective role of hardiness, we introduce the methods of product –moment correlation and Regression coping methods: In the course of product –moment correlation coping, negative events turn into positive ones or at least the harmful aspects become minimized. The product –moment correlation coping method consists of mental and behavioural components. According to the mental component, the individual considers events with tolerance and enlightenment. This approach greatly reduces the threat of events. Threat reduction provides a good opportunity for more accurate process of events, and through this analysis, with a better understanding of the stressors, finally, everything is provided with an appropriate behavioural component. According to Ellis, in the regression coping method, the individual exaggerates the threat of an event and evaluates it as a calamity or disaster. Because of this lack of mental contention on the tension factor, the person prefers to do things, trying to forget the tension factor, such as extreme recreations, abuse of drugs. Obviously, the outcome of this assessment is an inappropriate action with events and most likely a threat to mental health. In this way, we find out that people use different strategies to cope with the difficult and stressful situations of life. Perhaps this is why some individuals in stressful conditions do not show much resistance to diseases (Baraheni, 2011).

Form many researchers' point of view; the individuals who have a high level of hardiness use the product -moment correlation coping method when they encounter problems. In this way, the events of life are placed in a special place and are evaluated with a promising system of thoughts. For instance, to resolve your problem, you will discuss with the right people. On the contrary, the people who resort to the regression coping methods avoid facing the problem or seek refuge in behaviours such as aggression, drinking alcohol, and smoking. In this method, individuals forget the critical stresses for a while, but their underlying problem, which is the mentality with despair disappointment remains. While stress is a disease-causing phenomenon, hardiness has beneficial effects on individuals' health by modulating the impacts of stress. Hence, those who have a higher level of hardiness are more capable of resisting life-threatening events and therefore, they are less likely to become ill compared to the non-hardy individuals; considering the fact that assessment

and coping with stress play an important role in vulnerability of individuals in dealing with life-threatening events (Jomhari, 2010).

Resistance sources in hardiness

There are four sources against stress (Veis Karami; Ghazanfari & Rahimipour, 2016): Hardy attitudes, Coping hardiness, Hardy social support and Hardiness health exercises. Hardy attitudes consist of three basic beliefs of individuals about themselves, the world around them, and the interaction between the two mentioned points. Individuals who have high commitment fully involve themselves in life. High control makes a person believe they have a productive effect on problems and challenge makes the person try for changes and opportunities to grow. Hardy coping is the second of stress resistance that is the opposite side of regression coping method. It helps individuals find new and innovative solutions for problems, increases individuals' perception of stressful events, and helps them in resistance and strength. Hardy social support helps to resolve life-long changes and conflicts of life. The best relationship for individuals is the communication through which increases the sense of security, social support, protection, satisfaction, performance, and health of the person. The last source of resistance is the hardiness health exercises which include self-care, proper nutrition and relaxation that reduce the negative effects and stresses and protects against coping with stressful situations (Khoshaba, 2009; cited by Jomhari, 2010).

Psychological pressure and hardiness

One of the factors influencing the way one copes with stress is having a hard personality against stressors (Nagy & Nix, 1989). In Persian, it is not an exact equivalent for this word and the term hardiness largely describes moods. Research suggests that core personality traits may reduce psychological pressure of coping styles. Susan Kubas believes that psychological pressure affects some people more than others because they have high hardiness and this characteristic distinguishes them from others (Javanmard, 2013).

1.6. Approach to the theories of psychological change

The humanist approach to commitment

Humanists believe that inner faith and having a meaning in life can justify different behaviours. Thus, the calamities of the outside world can never eradicate the inner human forces, and humans

having a meaning for themselves will cope with any unpleasant situation and not lose their abilities (Tamatea, 2008). According to Frankle (2006), what makes people resistant to stressful events is mainly their cognitive practices. According to him, people use a different cognitive style in interpreting life events. For Haston, being meaningful means understanding life's events in a way that makes a person worth living. Every effort made against and to overcome psychological stress has a meaning within itself that actually changes lives for the better (Asiyaban, 2010).

Haston believes that stressful situations in life can always affect a person's ability to cope with a variety of conditions, and the continuation of difficult situations can, in turn, cause or worsen the physical and psychological disorders. In such a space, one has to search for more effective ways to cope with the consequences of life's pressures. Therefore, the existence of a particular cognitive style or a trait style that can reduce the severity of stressors is of particular importance. In the school of existential philosophy where humanists can fit into, there is never any emphasis on psychological determinism, and it is believed that we must teach people to be human, to be responsible for their own existence and healing. These individuals have a commitment to strive for a better life (Schneider & Längle, 2012). On the other hand, the concept of commitment in hardiness implies that every individual must be aware of his or her own existential philosophy, be able to go beyond the materials and deal with his own world of what he wants to do. Beliefs, ideology, and worldview are all components of personal commitment, one's commitment to his/her own thinking and theoretical thoughts (Sheard & Golby, 2010).

Kord Kelong and Vady Williams looked at the sense of alienation and commitment as a continuum, believing that as commitment reduces, alienation increases, and with increased commitment, one resorts to his/her internal forces and avoids alienation. They thought that when people are reluctant to commit to being human, they are experiencing the possibility of alienation, and the meaning of living is no longer motivating for them (Nelson & O'Donohue, 2006). The family environment can lead to an increase in commitment or perhaps an increase in alienation or decrease in commitment. Maddi and Kobasa have provided useful information in this regard. Considering the past experiences of adults, they have found that hardiness is primarily an acquired attribute and that three components of this attribute are supported by the type of family interaction during the interaction with parents (Haston, 2002; cited by Jameson, 2014).

According to Haston (2002), commitment is influenced by the family environment and the community, and when the child views the environment as a respectful environment, he/she can then achieve a sense of worthiness and self-esteem and the existential beliefs acquired through enculturation or purposeful cognition. Those with a higher level of commitment do not easily succumb to external events and, as a tree with a firm root in the heart of the earth, emphasize their roots and their existential origin, referring to it as an inner anchor. They can withstand severe storms and show high tolerance with deadly stressors (cited by Marks & Houston, 2002).

Cognitive behaviorism

The cognitive behaviourism school, which is closely related to the documentarism approach, was founded by Julian Rutter and later by Albert Bandura. Documentarians believe that human behavioural consequences must be interpreted and determined (Hardy, 2009). While proponents of Rutter's approach view source control as a determinant of behavioural outcomes, and believe that individuals are divided into two types of internal control source and external control source. Individuals with an internal control source believe that they are responsible for their own behavioural consequences. However, individuals with an external control source insist that behavioural consequences are due to chance and they cannot control these outcomes. Individuals with internal control source have high self-esteem and a low degree of conformity, and always have a greater sense of control over environmental outcomes, with greater control over others, while those with an external control source have lower self-esteem. They feel less valued, show greater conformity, and always feel unable to control the environment. These people are at risk of helplessness and cannot easily influence their surroundings (Haston, 2002; cited by Jameson, 2014).

Patton (1999) argues that a sense of mastery or control over the environment, the second component of hardiness, is rooted in family experiences. In general, if people in transition from infancy to adolescence feel that they are competent in solving problems, they will subsequently feel control over their environment. It should be noted that most of the tasks expected should be too simple depending on the age and ability of the child. Children will not feel successful even when they solve them, and if the tasks expected are too difficult, children will fail. So, the tasks faced by children must be appropriate with their age and ability in terms of difficulty level. And on the other hand, one of the most important factors reducing the detrimental effects of stressors

on physical health is the extent to which people control their behaviours. These people make the most of their effective and healthy habits and are always seeking to reduce the harmful effects of stressors through physical reactions. They use physical exercises to show better performance. These people emphasize energy improvement and believe they can control the autonomous responses (Montazeri, 2014).

The cognitivist approach to challenge

Cognitivists are among those who are in the field of psychopathology (Giere, 2010). For example, Susan Tenolen Herricksma (2008) concluded in her extensive study that depressed patients with lack motivation or some form of weakness spend a lot of time thinking about the frustrating and negative things. Women are affected by lack of motivation and think the frustrating things of life more than men. In other words, the percentage of depressed women is more or less twice the men. In the cognitivist approach to the individual assessment of the environmental event, the role of the assessment process is important. Haston believes that if people perceive environmental events as threatening, they consider them to be stressful, but if they perceive environmental events as an opportunity for personality development and challenge, then they will use logical and problem-based reactions in dealing with environmental events. Hence, cognitivists have increasingly emphasized evaluating individuals in identifying stressful source (quotated by Jameson, 2014).

In explaining the protective or challenging role of hardiness, Maddi introduces both transformational (alterant) and regressive coping methods. In other words, in the course of transformational coping methods, one uses certain behaviours to turn negative events into positive ones, or even to reduce their harm (Maddi & Kobasa, 1994).

The above method, namely the transformational coping method, consists of two subjective and behavioural components. As such, in the subjective component, one carefully considers the events with tolerance, greatly reducing the amount of threat and vulnerability and providing everything for the behavioural component. In regressive coping method, an individual exaggerates the extent to which an event is threatening and assesses it as a disaster or, according to Albert Ellis (2003), a tragedy and consequence of this assessment of a measure inappropriate with event is likely to be a mental health threat. Thus, people use different strategies to cope with difficult or stressful life situations, and perhaps for this reason some people under stressful conditions surrender to the disease without showing much resistance. In earlier studies by Kobasa and Maddi (1977),

hardiness was perceived as a mediator of stress among managers. Researchers predicted that accumulation of stressors such as job loss, separation, divorce, child abandonment or financial bankruptcy exacerbates the stressful conditions of their lives. The physical effects of these conditions are manifested in symptoms such as increased heart rate, chest pain and hand sweating. Its psychological effects also appear in feelings of anxiety, restlessness, or loss of appetite. All of these symptoms indicate that the body is in a state of arousal caused by the activity of the sympathetic system. If this condition persists, the person will not tolerate and will develop some form of disorder or illness. The disorder may be a simple illness such as the flu, a dangerous illness such as heart-attack, or a profound mental disorder such as major depression. In addition to the aforementioned factors, namely the nature and specific life style, how to cope with difficult life events employs two types of transformational or regressive. In the first type, the person somehow adapts to stressful events and tries to alter life events in a way that reduces their intensity and extent. To achieve this, he engages in life events and deals with them optimistically. While in the latter, one avoids getting involved in the feeling of despair caused by them rather than changing events (Greene, 2016).

As a psychologist and head of the US Department of Mental Health, Lambert considers hardiness a set of beliefs and attitudes that can generate behavioural tendencies. Lambert, with clinical trials, believes that life stresses and coping styles are closely related to each other, and if one considers in some cases life stresses as an opportunity to adapt again, then he/she represents an appropriate coping style (Lambert et al., 2003). Currently, it can be pointed out that Constantine and his colleagues believe that hardiness is a cognitive flexibility enabling one to plan successfully to choose the most appropriate coping solution under stressful conditions. According to Haston, this perspective represents cognitive factors in hardiness that are focused on successful planning and can exactly emphasize the cognitive elements of hardiness (Sharifi, 2012).

1.7. Summary of chapter one contributions.

The results of studies indicate that the intention of individuals for drug abuse is affected by their attitude toward substance abuse at least the first time they consumed drugs (Aghababaei et al., 2012). Formation of a positive or negative attitude resulting from the combination of knowledge, information, beliefs and emotions of adolescents about narcotics, on the one hand, and the value

they consider for drugs, on the other hand, constitute their attitude towards the substances. The subject of individuals' attitude has been considered in many psychological topics, including socio-cognitive psychology (Khalili et al., 2011). In this regard, Clarke et al. (2015), in a study, showed that health care providers' attitude towards patients with substance use-related problems influenced health care delivery.

There are many reasons are due to the tendency of the young to abuse drugs. Among them, some try to accept specific groups, and some tend to use drugs because of the lack of facilities to respond to emotional needs. The main cause of adolescent and young people's tendency towards drug abuse and addictive tendencies is psychological and emotional variables. Individuals who are unable to control their emotional skills are more likely to take addictive drugs (Lightfoot et al, 2018). One of the methods of drug abuse prevention is to inform people about the risks and disadvantages of narcotics and to improve the attitude of people from positive to negative towards addiction, addicts and narcotics (Sattari et al., 2003).

The tendency to abuse drugs is directly related to the individuals' attitudes such as their perception of the legality and extent of social acceptance of drugs, the harm caused by drug abuse, or the unpleasant manners and consequences of drug abuse (Sarvela & McClendon, 1988). Given that substance abuse is complex and of varying dimensions, any intervention in this field requires action and research. It's stated in this field that "Preventing drug use, such as preventing a disease, requires identification of the causes and factors involved." Based on the fact that recurring and sequential returns to drugs and inability of quitting are seen in the vast majority of addicts, it is suggested to researchers that drug abuse should be rooted in a more aggressive and longer-lasting structure that has determining aspects on behaviour (Walton & Roberts, 2004; cited by Adram & Nikmanesh, 2011).

Researches have shown that personality traits are among the important cognitive factors in tendency toward high-risk behaviours such as smoking, alcohol consumption, drug abuse, and insecure sexual activity (Rounsaville, Carroll & Onken, 2001). Costa and McCrae have defined personality characteristics as "the dimensions of individual differences in desire to show the stable patterns of thought, emotion, and action" (Costa & McCrae, 1987) (cited by Adram & Nikmanesh, 2011).

One of the personality characteristics is the category of psychological hardiness, which is one of the new issues attracting the attention of many researchers. Defining this variable, it's stated that psychological hardiness is a set of personality traits that act while confronting the stressful life events as a source of resistance and as a protective guard (quoted Verdi, Mehrabizadeh Honarmand &Najarian, 1999).

Psychological hardiness was initially noticed by Kobasa (1979) and was considered as a set of personality traits that act while confronting the stressful life events as a source of resistance and protective guard, and the individuals enjoying it can effectively deal with life's problems and pressures (cited by Haghighi, Attari, Rahimi & Soleimaninia, 1999). Kobasa, Maddi, and Zola (1983) have defined hardiness as a combination of beliefs about selves and world, which consists of three components of commitment, control, and challenging. Believing in change, transformation, and dynamism of life, and the attitude that every event does not imply a threat to human health and safety, create cognitive flexibility and tolerance against stressful events and ambiguous situations (Meddi, Wadha & Haier, 1996). Studies show that hardiness has a positive relationship with physical and psychological well-being, and as a source of internal resistance, it decreases the negative effects of stress and prevents physical and mental disorders (Florian, et al., 1995; Brooks, 2003).

Zhang (2010), in a study conducted among Chinese students, showed that hardiness is associated with five great factors of personality, so that three components of hardiness (commitment, control, and challenge) have a negative and significant relationship with neuroticism, and a positive and significant relationship with the other four factors of personality (extraversion, openness, agreeableness & conscientiousness). Delahaij, Gaillard and Dam (2010) reported that hardiness has a negative and significant relationship with adaptive coping styles. Inzlicht, Aronson, Good and Mckay (2006) have pointed out that resiliency and hardiness can reduce depression and anxiety. Naderi and Hosseini (2010) indicated that psychological hardiness and life expectancy have a positive and significant correlation. Veisi, Atef Vahid and Rezaee (2000) reported that in a stressful situation, those with a higher hardiness have a higher mental health rather than those who have a lower hardiness (cited by Zahed Babolan et al., 2011).

The other personality trait which is considered to be a predictor of drug addiction in this research is assertiveness. Assertiveness is defined as the ability to defend oneself, as well as the ability "to

say No” to the requests that one does not want to do (Bekker, Croon , Van Belkom &Vermee, 2008, quoted from Adam Rita, 2010) (quoted from Haji Hasani et al., 2012). Researches of Green, Forrhand, Beck & Vosk (1980) (cited by Haji Hasani et al., 2012) have shown that the individuals with less assertiveness tend to be more depressed and have less performance in school. The research results of Faroueddin and Sadro Sadat (2002) have shown that the self-concept of addicts and non-addicts is different, and a negative self-concept can be a factor in tendency towards addiction. It should be noted that in a research that Zargar, Najarian, and Na’aami (2008) conducted on employees of an industrial company in Ahwaz, there was no significant relationship between assertiveness and preparation for addiction. Addressing these findings, the present study attempts to answer the question, "Is attitude towards substance use predicted on the basis of assertiveness and psychological hardiness? “

Chapter Two

Objectives and hypotheses

2.1. Justification and importance and necessity of research

Drug abuse has always led to multiple problems in life span of human life, including general health, increased mortality, family and social harm, loss of educational and job opportunities, and increased rates of engagement with the judiciary, creating drug abuse cycles, Sustained damage, and retreat in future generations (Cherpitel & Ye, 2012). The beliefs and attitudes of individuals about drugs and the negative and positive consequences of their use are defined in terms of drug use tendency (Boles & Miotto 2003; Logan, Walker, Cole & Leukefeld 2002; Erickson 1982, cited by Aderam and Nikmanesh, 2011).

Drug abuse is one of the most prevalent issues of today that infects innumerable victims every year and causes serious harm to the individuals, families, and societies (Ahern, Stuber & Galea, 2007). The experience of countries that have been successful in the fight against drugs has shown that these successes require scientific knowledge, the typology of addicts, and their use in primary and secondary prevention with regard to indigenous variables. Researchers believe that addiction is influenced by indigenous variables (Derogatis & Melisaratos 1983); major cultural differences, differences in family structure and family interactions, differences in the system of values, social behaviours, the nature of social learning, and its impact on motivation, Finally, the many differences between Iranian personality and the people of the Western societies that discourage us from generalizing the Western findings about Iranian addicts without any controversy, and it is necessary to recognize the exact attributes and personality traits of Iranian addicts (Pahlavi et al., 2003).

Since in recent decades in Iran, even in relation to typology and recognition of the personality traits of Iranian addicts, scientific research published in specialized journals or presented at specialist congresses have been very rare, and also due to the need to understand the risk factors and predispositions the tendency to drug abuse, which could provide a basis for the formulation of preventive programs, also due to the fact that the relationship between personality and the tendency to high-risk behaviours such as drug abuse is obscure, the present research was conducted to determine the personality traits of susceptible individuals and also some related factors of prevention of addiction, in order to help future researchers, Investigating traits such as assertiveness and hardiness that are modifiable in the individuals' personality, as well as family

and community characteristics can guide future researchers and planners in the field of drug addiction prevention.

2.2. Objectives and hypotheses

General Objective:

To analyses the extent to which the psychological variables of assertiveness and hardiness predict the attitude towards drug use.

Specifics Objectives:

1. Predicting attitude towards substance use based on assertiveness.
2. Predicting attitude towards substance use based on psychological hardiness.

Hypotheses:

1. Assertiveness favours a negative attitude towards drug use
2. Psychological hardiness favours a negative attitude towards drug use

2.3. Brief description of study variables

Attitude towards substance use

Theoretical definition of attitude: "Attitude is a relatively stable collection of emotions, beliefs, thoughts, and behavioural readiness of individuals and groups" (Seif, 2001).

Theoretical Definition of drug abuse: Nelson et al. (1982) defines substance abuse as "the desire of some people to use certain substances that have a significant impact on the health of the person and society in which they live." (Ahmadi & Rostami, 2014: 19). According to Waill (1972), drug abuse means "the consumption of drugs that can cause serious damage to health, social communication and psychological function of the individual" (Nelson et al., 1982).

Theoretical definition of attitude towards drug abuse: Attitude towards drug abuse is a relatively stable set of feelings, beliefs and behavioural preferences of individuals, thoughts and groups

related to drug abuse. The Operational Definition of Attitude toward Drug Abuse: A score that participants receive from Attitude to addiction theory questionnaire (2001).

Assertiveness

Theoretical Definition of assertiveness: assertiveness means "supporting one's own rights and beliefs without violating the rights of others" (Schilling, translated by Arian, 2003: 56). The Operational Definition of assertiveness: The purpose of assertiveness in this research is the score that the participants gained in the Gambler and Ridge assertiveness Test (1975).

Psychological hardiness

Theoretical definition of psychological hardiness: "Hardiness is the most important personality trait that is important in relation to the subject of stress and includes a set of psychological characteristics that prevent people from reacting to potentially stressful situations or events. This personality trait consists of three components of control, commitment, and challenge "(Kobasa, 1979: 8). The Operational Definition of Psychological Hardiness: The score that participants receive from the Barton Questionnaire (1984).

Chapter Three

Methodology

In this chapter of the research: “Prediction of Attitudes towards Substance Use based on assertiveness and Psychological Hardiness”, all stages of the research methodology including methodology, statistical population, data collection method, sample and sampling method, sample size, measurement tools, description and analysis of data are considered.

3.1. Research methodology

This research is categorized in the general class of descriptive design, observational, and relational cross-sectional design.

In the correlational designs, the researcher seeks to study the relationship between two or more variables. The researcher must obtain the predictor variable before obtaining the criterion variable (Sharifi & Sharifi, 2001). In this type of research, the relationship between variables is analysed based on the purpose of the research. The correlational researches are three types in terms of purpose: (1) Bivariate correlational study; (2) Regression analysis and (3) Analysis of correlation matrix or covariance (Sarmad et al., 2000).

Since the present study purpose is investigating the relationship between two variables (assertiveness and psychological hardiness) as predictor variables and attitude toward substance use as a criterion variable, it can be concluded that the present study is a regression analysis.

3.2. Participants

The statistical population of this study consisted of the addicts referring to Tehran addiction treatment centres in Iran. According to the diagnosis of the addiction treatment centres, these people have high tendency to substance use. The data collection period was between February and May 2019.

The sample of participants is of convenience and consists of a total of 200 patients receiving treatment for substance use disorders in 8 specialized addiction centers in Tehran. Specifically, we have 138 men (69.2%) and 62 women (30.8%), with an age between 20 and 40 years (M=32, 50 and DE=0.94). 68% of the sample had a history of drug use between 2 and 7 years, with opium

being the main drug of consumption in 40.20%, followed by methamphetamines or “crystal” (15.16%), the crack (9%) and heroin (8%).

Characteristics of the centres of the addiction treatment clinics

The centres has two separate inpatient wards for men and women, and they have official permit from the Ministry of Health and Medical Education.

These centres work day and night and in 24 hours a day, they are able to accept patients on an outpatient, counselling, hospitalization and boarding.

They have private rooms of a rating of 30 beds for treatment of addiction through detoxification (3-4-day hospitalization) without pain and restlessness.

They also provide emergency services in the field of psychiatric problems and substance abuse and include: Diagnostic examinations, Pharmacological and Non-pharmacological treatments, Counselling and various individual and group psychotherapy for patients with psychiatric and psychosomatic disorders including addiction and in other words, drug abuse and dependency on a variety of drugs, stimulants and Psychotropic substances.

Also, Full Information of Personality traits of subjects Such as age, gender, education, work experience and … is given in research finding section. In addition, an example of a clinical interview of subjects is given in this chapter.

They have staff experts in addictions who can apply the following treatments:

- Detoxification treatments
- Maintenance treatment is performed using the Naltrexone.
- Specialized treatment for people using glass, cocaine, cannabis and brain stimulants. In the treatment of glass-using patients, patients are hospitalized for at least 5 to 7 days and are treated and consulted by psychiatrists.
- Group therapy and family therapy classes are held weekly by senior clinical psychologists for patients wishing to be hospitalized longer.
- After detoxification and drug treatment, these patients are referred to other centre by the staff, which have an approximately 2500 m space with daily sessions and sport equipment.

Size and sampling method

Also based on Tabachnick and Fidell's formula, the number of samples is 112, but 200 people are considered as the statistical sample for more assurance and better generalization (Three levels: Psychological hardiness and one level: Assertiveness).

$$n>m8+50 \rightarrow 8 \times 8+50=112 \rightarrow 200$$

In this research, a non-probability (purposive) sampling method is used based on the thematic necessity and the goals of the researcher. Accordingly, sample will be selected from eight addiction treatment centres in Tehran, among them substance addicts are identified, as well as sample is drawn from women and men. Exclusion criteria were simultaneous use of drugs such as methadone for quitting addiction and chronic and concomitant illnesses such as physical disability.

Regarding the mental states of the statistical sample, it can be said that addicts have different moods during the day, sometimes upset, tired, and powerless, and sometimes energetic, happy and talkative. Depression, hopelessness, isolation, moodiness, lack of desire for life, mental retardation and loss of perception, severe sadness, suspicion and pessimism, fear and worry, strong dependency feeling and escaping reality are among the major psychological consequences of addiction in addicts.

In this research, the researcher first obtained the necessary permits from the Ministry of Health and Medical Education for the cooperation of the Ministry of Health with the researcher and then He went to the addiction treatment centres with the necessary permits and after needed coordination with the head of the clinic in this centre and collected data through clinical interviews as well as research questionnaires.

3.3. Measures

3.3.1. Interview

Before explaining the questionnaire, one sample of interview is as follow.

According to a plan designed to carry out this part of the research including expert interviews and related tests, it was conducted in 2019.

The researcher, in coordination with the addiction centres to determine the best time for the interview, concluded that, given the existing circumstances, the people in these controlled addiction centres follow certain things. Schedules based on the type of substance used and timing of the interview and the tests should be done by a specialist in those centres after drug therapy and behaviour therapy so that they can stay calm and think properly and get the right results. Of course, the design will be different for different people. Consequently, after visiting the centres and considering the exclusion criteria of the research as well as acquainting the individuals with the research goals by the researcher, individuals respond to the research questionnaires separately. According to the number of questions in the questionnaire, the average response time was 30 minutes. In order to prevent possible bias in answering the questionnaires and to increase the validity of the obtained results, a balance strategy was used and changing the administration order of the questionnaires preserved the validity of the answers to the questions.

Part of the internship report of the Inpatient Treatment and Rehabilitation Centre

Table 3.1. The following table provides information on a sample of interviewees.

Patient Status Report Form		
Female	Gender	The client's characteristics
Fifteen years old	Age	
Third grade of junior high school	Level of education	
Yes	Residency	
Healthy	Physical and mental health Status	
Student	Job	
Stated in the report		The characteristics of the client's family
Self- reference		Referred by
Heroin quitting		Reference cause
2019		Reference date
The client, who looked very childlike, was frightened and chewing her nails and avoided answering the questions. But being assured of environmental safety, she asserted after twenty minutes:		Problem from the client's perspective

At our school there was a girl named Nyusha who was very beautiful and rich. Every day his parents brought her to school by car, and most times she herself was driving and his mother was watching her. Her mother was very young. We used to go to Nyusha's house with our boyfriends and her mother was very warm with us. They had a lot of night parties. We went to Nyusha's house using studying as an excuse. Drinks were served at the parties, and it was the first time I ever drank.	
One day, on the suggestion of Nyusha's mother, I smoked cigarettes and later found out that cigarette was a kind of narcotics. Because old-fashioned fun was being repeated, I gradually got the feeling that my body was in need of more and that I was not satisfied and I want a better thing. Our visit to Nyusha's house was not weekly. Many times, we had to go there once a day to use heroin. It was not a former euphoria. It was a different feeling. I was on the clouds and I didn't want to believe my addiction. It was like a dream.	Addiction initiation time
Until one night at the party, police monitoring the house beforehand arrested everyone who was in the house and then informed the families. My father freed me on bail. Later, I found out that she was not the mother of Nyusha, meaning that Nyusha was not their child at all. They were a small team, a subset from a big band and their goal was to make others addicted and thereby make money. I had even heard that some of these so-called runaway girls were being held and later sold and one of their crimes was drug distribution. Later that night, my father beat me until I became unconscious, and taken to the hospital where they became aware of my heroin addiction. I wasn't addict, but the symptoms had left in my body. Now four days has passed and my father fears that I become addicted again. What should I do now to get my father to forgive me? I don't like to believe my life is over.	Family's awareness of child's addiction
Client has been addicted to heroin for about a year and her familiarity has initiated with cigarette and cannabis. The social status and appearance of one of her high school friends deceives her and she is contaminated with substances. The other friends are in the same situation. The client's family has good economic status, but they are in the typical level in terms of emotional relationship. The client resorts to her friend's family to fill the emotional gaps and becomes familiar with other misconducts and their ugliness and bigness breaks in her mind and this relationship leads to asexual friendships completely inconsistent with her culture in terms of family culture and status.	Problem history

Dr. Sabaghi estimated that the problem is because of the lack of emotional connection - the teenagers' unawareness about the dangerous situations they face - the lack of a client-mother relationship - the client's resort to a man other than her father as a supporter – lack of the motivating perhaps in life – socialization with bad friends - and lack of research by family and even school about such friendships.	Problem from the social worker's perspective
The doctor offered the client five-session counselling once a week and reminded her as a strong and wilful person who had quitted addiction easier than what addicts could imagine. These several counselling sessions is to find permanent hatred and motivation to start a beautiful life, and God has given this grace very easily to the client. In these sessions, prayer therapy and spiritual belief enforcement as well as educational counselling are done and, ultimately, the client's relationship with the organ should not be cut off, and in many cases their experiences will be of great help to the centre. The doctor requested the client to stay in these centres the day after graduation because it was a great help to her peers.	Auxiliary plan

3.3.2. Attitude toward Addiction Questionnaire.

There is a questionnaire to measure the attitudes toward addiction and narcotics with two components, positive attitude and negative attitude as Form A and B with 35 items, made by Nazari (2001). The initial form of the scale has 64 items with two parts to result in two parallel forms in the scale. Therefore, it has been necessary to examine the parallelism between two Forms A and B and also the elements of two Forms with each other. The obtained results are as follows:

- In Form A, mean and standard deviation of attitude are 65/23 and 5/76, respectively.
- In Form B, mean and standard deviation of attitude are 65/23 and 6/30, respectively.
- The correlation between two Forms A and B is 0.82.

To measure the attitude toward addiction and narcotics and to prepare a suitable scale for this purpose, Likert scale has been used in designing the questionnaire. As for the desirable items or positive attitude toward addiction, the answers "strongly agree, agree, no idea, disagree, strongly disagree" are given scores 1, 2,3,4,5, respectively, and as for the undesirable items or negative attitude toward addiction, the scoring is done in reverse order. In other words, in the questions 1, 2, 3, 6, 8, 10, 13, 16, 23, 24, 28, 30, 31, 32, 33 and 34, the scoring method is as follows: strongly

agree = 5, agree to some extent = 4, no idea = 3, disagree to some extent = 2 and strongly disagree = 1

However, in questions 4, 5, 7, 9, 11, 12, 14, 15, 17, 18, 19, 20, 21, 22, 25, 26, 27, 29 and 35, the reverse scoring method is as follows:

Strongly agree = 1, agree to some extent = 2, no idea = 3, disagree to some extent = 4 and strongly disagree = 5

Therefore, the range of scores in this questionnaire will vary from 35 to 175, and a higher score represents the favourable attitude toward addiction and substance use.

Validity and reliability: Form and content validity of this test have been confirmed by three professors in Karimi's research (2012). To obtain its reliability, Cronbach's alpha coefficient was used which was 0.79, indicating its acceptable reliability.

3.3.3. Gambrill-Richey Assertiveness Questionnaire.

Assertiveness questionnaire is a 40-item assertive test (1975). Some items have been modified due to lack of conformity with Iranian culture and it has been reduced to 22 items. Each test item indicates a situation requiring assertiveness behaviour. The subject is asked to answer items in terms of a 5-point rating scale. Items of this test are of several types: a) rejecting a request; b) expressing personal limitations; c) beginning a social encounter and expressing positive emotions; d) coping and accepting criticism; e) accepting differences with each other and f) assertiveness in situations requiring help (negative feedback). This questionnaire, unlike other assertiveness questionnaires, has not been made for specific individuals, and its items cover a wide range of different situations (Arjomand, 2007).

Reliability of the questionnaire: In terms of reliability, there is a high correlation between test items. The factor coefficient of the various test items is reported to be between 39% and 70%. The reliability coefficient was reported 0.81 by Gambrill and Richey. After eliminating 18 items and coordinating with the Iranian culture, the reliability coefficient was calculated 0.82 by Shohreh Amoli at Tehran Psychiatric Institute with 40 girl students in a guidance school with a 25 days

period (Mahmoudi et al., 2004). In this study, the reliability of the questionnaire was estimated at 0.80 using Cronbach's alpha method.

Validity of the questionnaire: The questionnaire validity has been confirmed by the professors of Allameh Tabatabai University of Tehran and the factor validity of the test items has been reported 0.67 (Bahrami, 1996).

Questionnaire scoring method: The items of this scale have 5 options: 1) extremely upset, 2) very upset, 3) moderately upset, 4) a little upset and 5) not at all. Subjects select one of these options and mark it. In this scale, the items are scored on the basis of the values "1, 2, 3, 4, 5". Finally, the total sum of the scores show the degree of assertiveness of the individual (Arjomand, 2007).

3.3.4. Psychological Hardiness Questionnaire.

To measure psychological hardiness, Barton's questionnaire (1984) made by Kobasa (1986, cited by Ghorbani, 1994) with 50 questions including three components of challenge (17 items), commitment (16 items) and control (17 items), and the four-option accountability scale (from “not at all correct to completely correct”) have been introduced and used. This questionnaire was translated and validated in Iran by Khorasani and Ebadi (1997, cited by Emadi, 2008). Validity and reliability of psychological hardiness questionnaire in Iran have been investigated in several researches. In Emadi's research (2008), divergent structure validity for assessment of the validity of this questionnaire, and Cronbach's alpha coefficient for measuring its reliability are used.

In this regard, a significant relationship between psychological hardiness and mental health (-0.46 and $P < 0.01$) has been reported. In Ebadi and Khorasani’s research (1997, quoted from Marhamati, 2007), the reliability of this questionnaire has been reported using Cronbach's alpha 0.66, 0.66 and 0.06 for the three components of challenge, commitment and control, respectively. In this study, Cronbach's alpha was 0.46 for challenge, 0.46 for commitment, 0.78 for commitment, 0.67 for control and 0. 81 for the entire questionnaire. An example of the items in this questionnaire is as follows: No matter how hard I try; my efforts will not be effective anyway.

General information of questionnaires

Finally table 3.2 shows the variables which are explained by the questions.

Table 3.2 Distribution of questions for each of the research variables

Number of questions	References	Data collection resource	Dimensions	Main constructs
17	Barton (1984)	Addicts referring to addiction treatment centres in district 17 of Tehran in 2015	Challenge	Psychological hardiness
16			Commitment	
17			Control	
35	Self-Reporting by Nazari (2001)		-	Attitude towards addiction
22	Gambrill-Richey (1975)		-	Assertiveness

3.4. Data analysis

To describe statistical data by drawing frequency distribution tables, the indices of median and distribution dispersion will be used. To analyse the data descriptive statistics (classification and description of information), to investigate the research hypotheses the Kolmogorov-Smirnov test, and to ensure the normal distribution of the data according to the mentioned hypotheses the multiple regression test will be used simultaneously.

3.5. Ethical considerations

In this research, the researcher first obtained the necessary permits from the Ministry of Health and Medical Education for the cooperation of the Ministry of Health with the researcher and then He went to the addiction treatment centres with the necessary permits and after needed coordination with the head of the clinic in this centre and collected data through clinical interviews as well as research questionnaires.

In any research, there are ethical considerations that the researcher must consider. Ethical considerations are also taken into account in this study:

- Observing the right to anonymity of questionnaires and using codes instead of individuals' names;
- Explaining the aims and stages of the study before administrating the questionnaire;

— Keeping participants' information confidential;

— Providing participants with research results to upon their request;

— Voluntary participation in research.

— Signature of the informed consent by the participants.

Chapter Four

Results

The statistical population of this study was addicts who referred to addiction centres in Tehran, which indicated that they have a high tendency towards drug use. Of this, 200 people were selected as a sample and the questionnaires of "Assertiveness", "Psychological Hardiness" and "Attitudes toward Drug Use" were distributed among them. Data was collected and analysed using SPSS software, but because one of the main goals in each research is to discover the relationship between the variables of the research. Therefore, it is better to describe the research data as the basis for testing the hypotheses. From this, the research data in this chapter will be analysed in the following two sections: a) Statistical description of the data, includes points 4.2 to 4.3.; and b) Statistical inference of data, includes. The aim is to respond to the objectives and hypotheses raised.

4.1. Description of the socio-demographic profile

The sociodemographic characteristics analysed in the sample of subjects are: gender, age, education, social class, income level, employment status and marital status. These results are also shown in the table 4.1.

Gender

As shown in the Table 4.1, in relation to gender, a 69.2% (n=138) of the subjects are male and 30.8% (n=629) female.

Age

The average age of the sample is 27 with a standard deviation (SD) of 0.872. As shown in the Table 4.1, 17.5% (n=35) of the subjects are under 20 years old, 48.3% (n=97) are between 21 to 30 years old, 23.7% (n=47) are between 31 to 40 years old and 10.5% (n=21) are over 40 years old.

Education

The majority of the sample has diploma and less certificates (67.2%; n=136), 27.2% (n=55) of them have Bachelor degree and 5.6% (n=9) have Master degree and higher (table 4.3.).

Social class

As seen in the Table 4.1, 19% of the subjects are in the upper class, 35% in the middle class and 46% in the lower class.

Table 4.1. Socio-demographic profile

VARIABLE	FREQUENCY (N=200)	PERCENTAGE (%)
Gender		
Male	138	69.2
Female	62	30.8
Age Range		
Under 20 age	35	17.5
21 to 30	97	48.3
31 to 40	47	23.7
Over 40	21	10.5
Education		
Diploma and less	136	67.2
Bachelor	55	27.2
Master degree and higher	9	5.6
Social class		
Upper	38	19
Middle	70	35
Lower	92	46
Income level		
Below 20 million Rials per month	26	13
Between 20 to 40 million Rials per month	76	38
Between 40 to 60 million Rials per month	60	30
Above 60 million Rials per month	38	19
Employment status		
Unemployed	64	32
Employed	136	68
Marital status		
Married	96	48
Divorced	36	18
Single	68	34

Income level

As shown in the table above, the income level of 13% of the subjects is below 20 million Rials per month, 38% between 20 to 40 million Rials per month, 30% between 40 to 60 million Rials per month and 19% above 60 million Rials per month.

Employment status

As seen in the table above, 32% of the subjects are employed and 68% unemployed.

Marital status

As seen in the table above, 48% of the subjects are married, 18% divorced and 34% single.

4.2. Description of the clinical profile of addiction

4.2.1. Main consumed substances

As seen in the Table 4.2 the amount of opium, glass, heroin, crack, hashish, ecstasy, opium sap and other substances used is 40.2%, 15.16%, 8%, 9%, 4.32%, 2.32%, 3% and 18%, respectively.

Table 4.2. Types of substances consumed in the total sample

Substances used	Frequency (n)	Percentage (%)
Opium	80	40.2
Glass	30	15.16
Heroin	16	8
Crack	18	9
Hashish	9	4.32
Ecstasy	5	2.32
Opium sap	6	3
Other substances	36	18
Total	**200**	**100**

Table 4.3. Types of substances consumed by gender

Substances used	***Male***		***Female***	
	n	**%**	**n**	**%**
Opium	51	36.96	29	46.77
Glass	15	10.87	15	24.19
Heroin	13	9.42	3	4.84
Crack	17	12.32	1	1.61
Hashish	9	6.52	0	0.00
Ecstasy	4	2.90	1	1.61
Opium sap	3	2.17	3	4.84
Other substances	26	18.84	10	16.13
Total	**138**	**100**	**62**	**100**

In the table 4.3, we observe that most of men (36.96%) use Opium. Consuming of other substances (18.84%), Crack (12.32%), Glass (10.87%), Heroin (9.42%), Hashish (6.52%) and Ecstasy (2.90%) are in the lower ranks. And, the least substance used by them is Opium sap (2.17%). Also, most of women (46.77%) consume Opium. Using of Glass (24.19), other substances (16.13%), Heroin (4.84%), Opium sap (4.84%) and Crack (1.61%) are in the lower ranks. Finally, no woman consumes Hashish.

In the Table 4.4 we can see that the majority of all ages (37.14% in under 20 age group, 44.33% in people between 21 and 30 and 38.30% in 31 to 40 age group) consume Opium except the people over 40; They mostly use Glass (33.33%). They are addicts in under 20 age group who do not use Ecstasy and Opium sap; Also, people who have age 21 to 30, do not consume Hashish.

Table 4.4. Types of substances consumed by age

Substances used	***Under 20***		***21 to 30***		***31 to 40***		***Over 40***	
	n	**%**	**n**	**%**	**n**	**%**	**n**	**%**
Opium	13	37.14	43	44.33	18	38.30	6	28.57
Glass	6	17.14	13	13.40	4	8.51	7	33.33
Heroin	2	5.71	8	8.25	4	8.51	2	9.52
Crack	2	5.71	9	9.28	6	12.77	1	4.76
Hashish	2	5.71	0	0.00	5	10.64	2	9.52
Ecstasy	0	0.00	2	2.06	2	4.26	1	4.76
Opium sap	0	0.00	3	3.09	2	4.26	1	4.76
Other substances	10	28.57	19	19.59	6	12.77	1	4.76
Total	**35**	**100**	**97**	**100**	**47**	**100**	**21**	**100**

In table 4.5 we observe that using Opium is popular among addicts where 44.85% of people who have diploma and less degree, 29.09% of who have bachelor degree and 33.33% of addicts with master degree and higher consume it. As can be seen, Ecstasy and Opium sap among addicts with diploma and less (1.47%) and bachelor (3.64%) degree and Heroin, Crack and Hashish in people with master and higher degree (0%) are not popular.

Table 4.5. Types of substances consumed by educational levels

Substances used	*Diploma and less*		*Bachelor*		*Master degree and higher*	
	n	**%**	**n**	**%**	**n**	**%**
Opium	61	44.85	16	29.09	3	33.33
Glass	19	13.97	10	18.18	1	11.11
Heroin	12	8.82	4	7.27	0	0.00
Crack	12	8.82	6	10.91	0	0.00
Hashish	5	3.68	4	7.27	0	0.00
Ecstasy	2	1.47	2	3.64	1	11.11
Opium sap	2	1.47	2	3.64	2	22.22
Other substances	23	16.91	11	20.00	2	22.22
Total	**136**	**100**	**55**	**100**	**9**	**100**

In table 4.6, we see the rate of consuming substances among addicts with different social classes. 34.21% of people in upper class, 34.29% of addicts in middle class and 46.74% of addicts in lower class consume Opium. In other word, it is the most consuming substance among the three social classes. After that, the majority of addicts in two upper and middle class tend to consume other substances except the ones which are listed in the below table. But, most people who are not in good financial shape use Glass after who consume Opium. What is interesting in the below table is that Glass, Heroin and Crack (10.53%) and Hashish and Opium sap (5.26%) have the same popularity among some addicts in upper class. Also, it is true for Heroin, Crack and Hashish (7.14%) in middle class; but, in lower class, addicts have different tastes except in Hashish and Opium sap with lower percentage (2.17%).

Table 4.6. Types of substances consumed by social class

Substances used	*Upper*		*Middle*		*Lower*	
	n	**%**	**n**	**%**	**n**	**%**
Opium	13	34.21	24	34.29	43	46.74
Glass	4	10.53	10	14.29	16	17.39
Heroin	4	10.53	5	7.14	7	7.61
Crack	4	10.53	5	7.14	9	9.78
Hashish	2	5.26	5	7.14	2	2.17
Ecstasy	1	2.63	1	1.43	3	3.26
Opium sap	2	5.26	2	2.86	2	2.17
Other substances	8	21.05	18	25.71	10	10.87
Total	**38**	**100**	**70**	**100**	**92**	**100**

4.2.2. Duration of substance use

As seen in the Table 4.7 duration of drug use by 30% of the subjects is under 2 years, 40% between 2 to 5 years, 18% between 5 to 7 years and 12% over 7 years.

Table 4.7. Distribution of duration of substance use by the subjects

Duration of substance use	Frequency	Percentage
Under 2 years	60	30
2 to 5 years	80	40
5 to 7 years	36	18
Over 7 years	24	12
Total	**200**	**100**
Mean	**3.14**	
SD	**0.98**	

In the Table 4.8 we classified duration of using substances by the gender of addicts. The duration of using substances of the most of men (38.41%) and women (43.55%) who are addicted is between 2 and 5 years. After them, it is just under 2 years for 33.33% of men and 22.58% of women who are addicted. Almost with the same rate (18%) of men and women are addicts of 5 to 7 years. The most interesting part of the table is that as duration of using substances goes by (over 7 years), the number of addicts in both genders decreases (10.14% for male and 16.13% for female).

Table 4.8. Distribution of duration of substance use by gender

Duration of substances used	***Male***		***Female***	
	n	**%**	**n**	**%**
Under 2 years	46	33.33	14	22.58
2 to 5 years	53	38.41	27	43.55
5 to 7 years	25	18.12	11	17.74
Over 7 years	14	10.14	10	16.13
Total	**138**	**100**	**62**	**100**

In the table 4.9, about half the addicts of under 20 (45.71%), 21 to 30 (44.33%), 31 to 40 (29.79%) and over 40 (33.33%) years old are consuming substances the time between 2 to 5 years. After that, duration of substances using is high among age groups (34.29% for under 20, 29.9% for 21 to 30, 27.66% for 31 to 40 and 28.57% for over 40 years old). As it is mentioned in the last part,

when the duration of using substances goes by (over 7 years), the number of addicts in all age groups decreases.

Table 4.9. Distribution of duration of substance use by age

Duration of substances used	*Under 20*		*21 to 30*		*31 to 40*		*Over 40*	
	n	**%**	**n**	**%**	**n**	**%**	**n**	**%**
Under 2 years	12	34.29	29	29.90	13	27.66	6	28.57
2 to 5 years	16	45.71	43	44.33	14	29.79	7	33.33
5 to 7 years	5	14.29	17	17.53	10	21.28	4	19.05
Over 7 years	2	5.71	8	8.25	10	21.28	4	19.05
Total	**35**	**100**	**97**	**100**	**47**	**100**	**21**	**100**

In the table below, we can see that the second raw (2 to 5 years) has the most frequency (41.91% for people with diploma and less degree, 36.36% for bachelors and 33.33% for addicted with master and higher degree) among the others. In total amount, it is seen that the majority of the addicts have diploma and less degree (136 people). It can be proposed that the higher the education, the less addicted.

Table 4.10. Distribution of duration of substance use by educational levels

Duration of substances used	*Diploma and less*		*Bachelor*		*Master degree and higher*	
	n	**%**	**n**	**%**	**n**	**%**
Under 2 years	42	30.88	17	30.91	1	11.11
2 to 5 years	57	41.91	20	36.36	3	33.33
5 to 7 years	22	16.18	12	21.82	2	22.22
Over 7 years	15	11.03	6	10.91	3	33.33
Total	**136**	**100**	**55**	**100**	**9**	**100**

In the table 4.11, we can observe that the lower the social class level, the more duration substances use (38 addicts of upper class, 70 ones for middle and 92 people for lower class). As it is mentioned before, the people with a little experience (more than 2 and less than 5 years) of using substances have the most rate among others. Perhaps it is because of the financial power that people in the upper social class still use substances (over 7 years with 28.95%). It is time under 5 years that about 73% of addicts in middle class consume substances. It is 74% for lower class addicts.

Table 4.11. Distribution of duration of substance use by social class

Duration of substances used	*Upper*		*Middle*		*Lower*	
	n	**%**	**n**	**%**	**n**	**%**
Under 2 years	9	23.68	25.00	35.71	26	28.26
2 to 5 years	12	31.58	26.00	37.14	42	45.65
5 to 7 years	6	15.79	11.00	15.71	19	20.65
Over 7 years	11	28.95	8.00	11.43	5	5.43
Total	**38**	**100**	**70**	**100**	**92**	**100**

4.3. Description of the psychological variables

In this section, the variables Attitude toward Drug Use, Assertiveness and Hardiness were compared based on demographic characteristics. The results of these comparisons in different groups are presented below.

4.3.1 Attitude toward Drug Use

a) Gender

In this section, we want to explore gender-based Attitude toward Drug Use. For this purpose, we used analysis of variance (assuming equality of variance between groups).

Table 4.12. Analysis of Variance of gender-based Attitude toward Drug Use.

	Sum of Squares	**df**	**Mean Square**	**F**	**Sig.**
Between Groups	.014	1	.014	.028	.866
Within Groups	99.871	198	.504		
Total	99.885	199			

As shown in the table above, given that the numerical significance level is greater than 0.05, it can be deduced that the null hypothesis that there is no difference in mean of gender-based Attitude toward Drug Use is reasonable and accepted. Therefore, it can be stated that there is no difference in Attitude toward Drug Use based on the gender of the subjects. The Figure 4.1 provides a visual comparison of the mean Attitude toward Drug Use by gender.

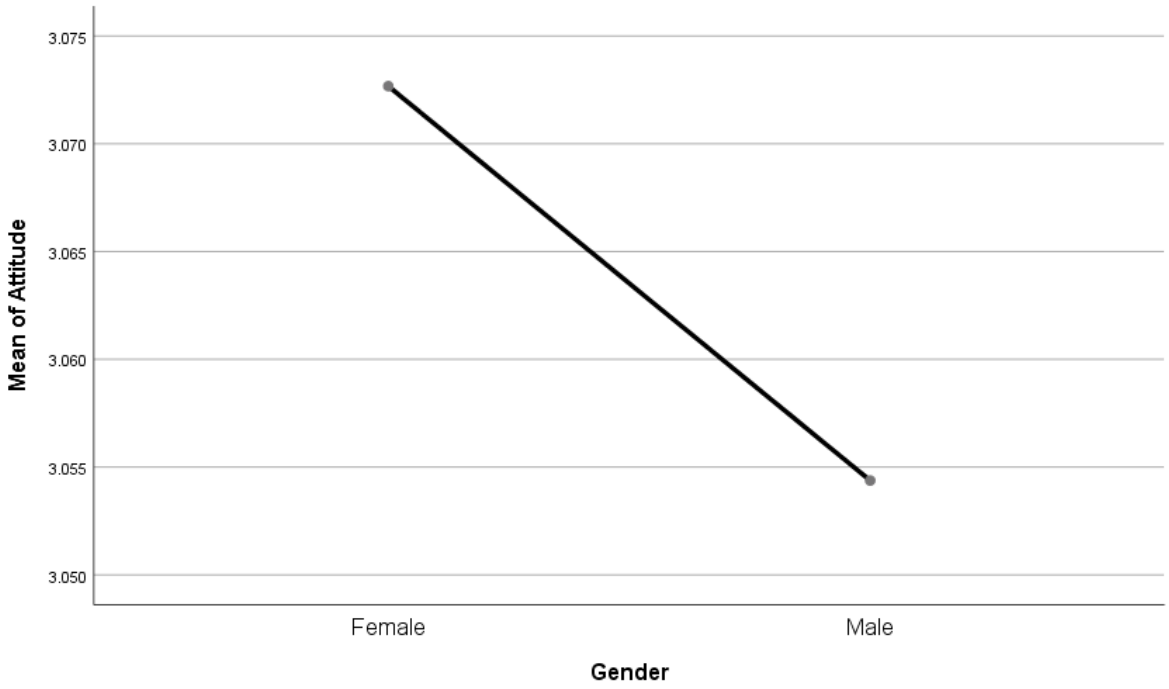

Figure 4.1. The mean of Attitude toward Drug Use by gender

b) Age

In this section, we want to explore age group-based Attitude toward Drug Use. For this purpose, we used analysis of variance (assuming equality of variance between groups).

Table 4.13. Analysis of Variance of age group-based Attitude toward Drug Use.

	Sum of Squares	**df**	**Mean Square**	**F**	**Sig.**
Between Groups	1.116	3	.372	.738	.530
Within Groups	98.769	196	.504		
Total	99.885	199			

As shown in the table above, given that the numerical significance level is greater than 0.05, it can be deduced that the null hypothesis that there is no difference in mean of age group-based Attitude toward Drug Use is reasonable and accepted. Therefore, it can be stated that there is no difference in Attitude toward Drug Use based on the age group of the subjects.

The Figure 4.2 provides a visual comparison of the mean Attitude toward Drug Use by age group.

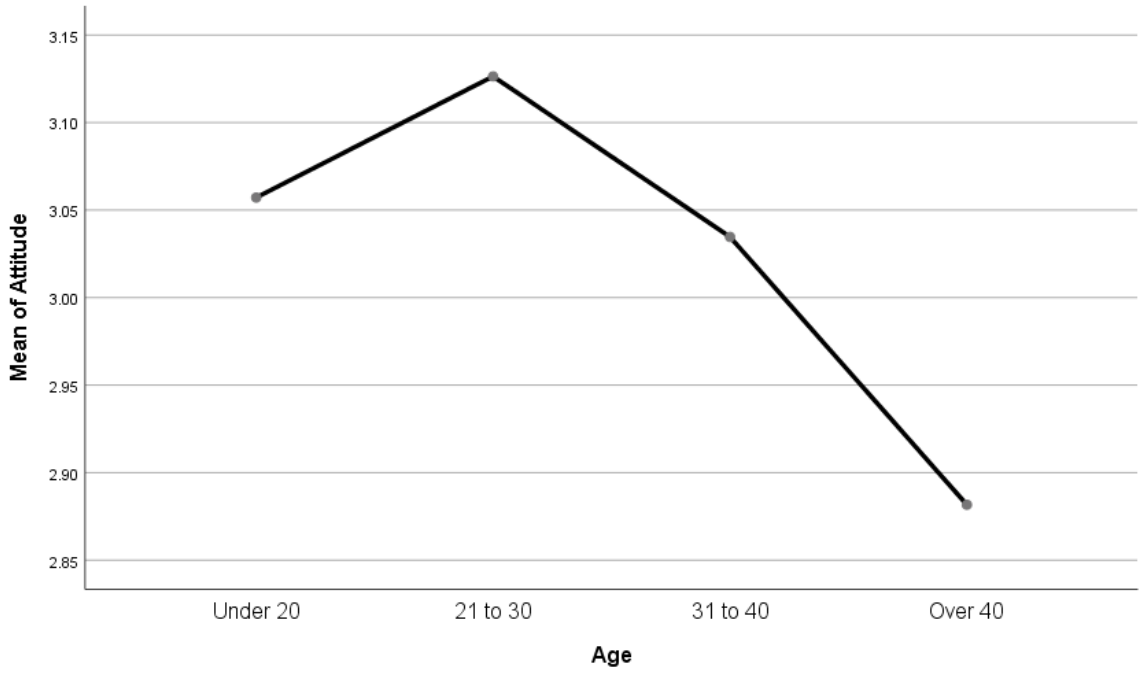

Figure 4.2. The mean of Attitude toward Drug Use by age group

c) Education

In this section, we want to explore education-based Attitude toward Drug Use. For this purpose, we used analysis of variance (assuming equality of variance between groups).

Table 4.14. Analysis of Variance of education-based Attitude toward Drug Use.

	Sum of Squares	**df**	**Mean Square**	**F**	**Sig.**
Between Groups	1.022	2	.511	1.018	.363
Within Groups	98.863	197	.502		
Total	99.885	199			

As shown in the table above, given that the numerical significance level is greater than 0.05, it can be deduced that the null hypothesis that there is no difference in mean of education-based Attitude toward Drug Use is reasonable and accepted. Therefore, it can be stated that there is no difference in Attitude toward Drug Use based on the education of the subjects. The Figure 4.3 provides a visual comparison of the mean Attitude toward Drug Use by education.

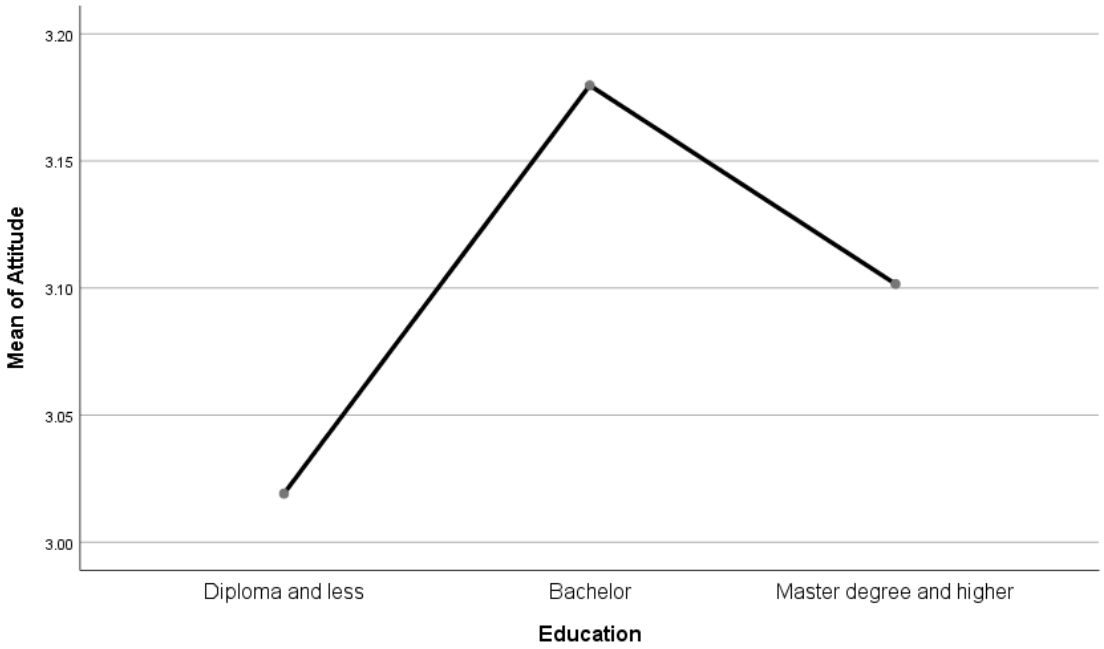

Figure 4.3. The mean of Attitude toward Drug Use by education

d) Social class

In this section, we want to explore social class-based Attitude toward Drug Use. For this purpose, we used analysis of variance (assuming equality of variance between groups).

Table 4.15. Analysis of Variance of Social class-based Attitude toward Drug Use.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.191	2	1.595	3.250	.041
Within Groups	96.694	197	.491		
Total	99.885	199			

As shown in the table above, given that the numerical significance level is less than 0.05, it can be deduced that the null hypothesis that there is no difference in mean of Social class-based Attitude toward Drug Use is rejected. Therefore, it can be stated that there is difference in Attitude toward Drug Use based on the Social class of the subjects. In other words, with the low social class, the probability of using drug is increasing. The following table compares two by two levels of difference between each level of social class.

Table 4.16. Multiple Comparisons of Social class-based Attitude toward Drug Use.

(I) SC	(J) SC	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Upper	Middle	.27708	.14117	.051	-.0013	.5555
	Lower	.01783	.13510	.895	-.2486	.2843
Middle	Upper	-.27708	.14117	.051	-.5555	.0013
	Lower	-.25925*	.11112	.021	-.4784	-.0401
Lower	Upper	-.01783	.13510	.895	-.2843	.2486
	Middle	.25925*	.11112	.021	.0401	.4784

*. The mean difference is significant at the 0.05 level.

The Figure 4.4 provides a visual comparison of the mean Attitude toward Drug Use by social class.

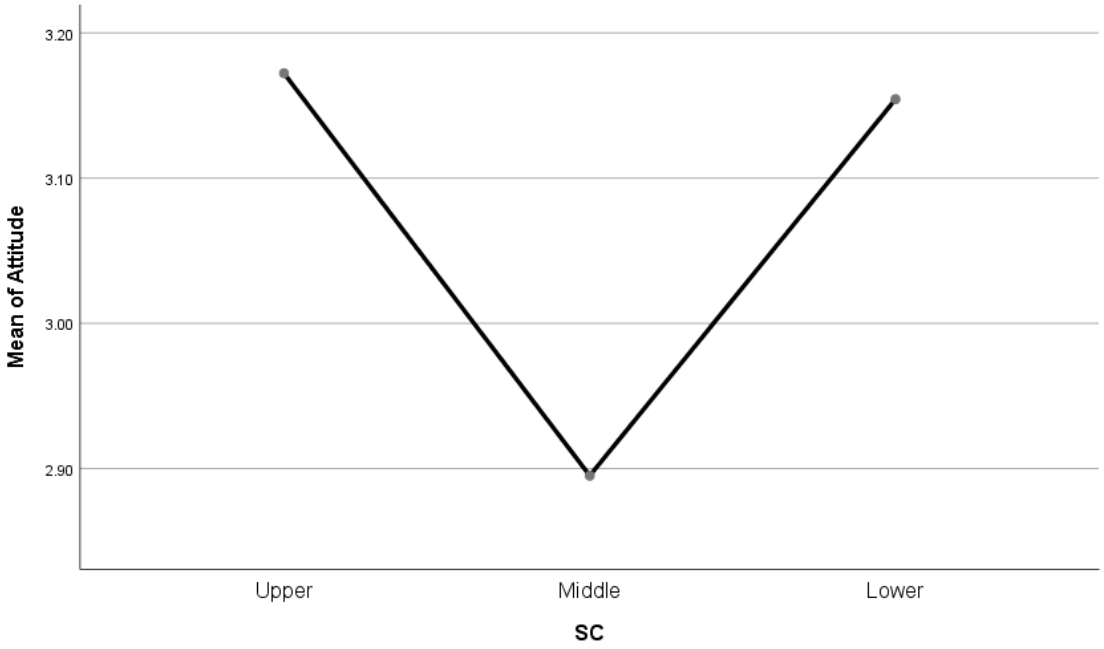

Figure 4.4. The mean of Attitude toward Drug Use by social class

e) Income level

In this section, we want to explore income level-based Attitude toward Drug Use. For this purpose, we used analysis of variance (assuming equality of variance between groups).

Table 4.17. Analysis of Variance of Income level-based Attitude toward Drug Use.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.131	3	.377	.749	.524
Within Groups	98.754	196	.504		
Total	99.885	199			

As shown in the table above, given that the numerical significance level is greater than 0.05, it can be deduced that the null hypothesis that there is no difference in mean of Income level-based Attitude toward Drug Use is reasonable and accepted. Therefore, it can be stated that there is no difference in Attitude toward Drug Use based on the Income level of the subjects.

The Figure 4.5 provides a visual comparison of the mean Attitude toward Drug Use by income level.

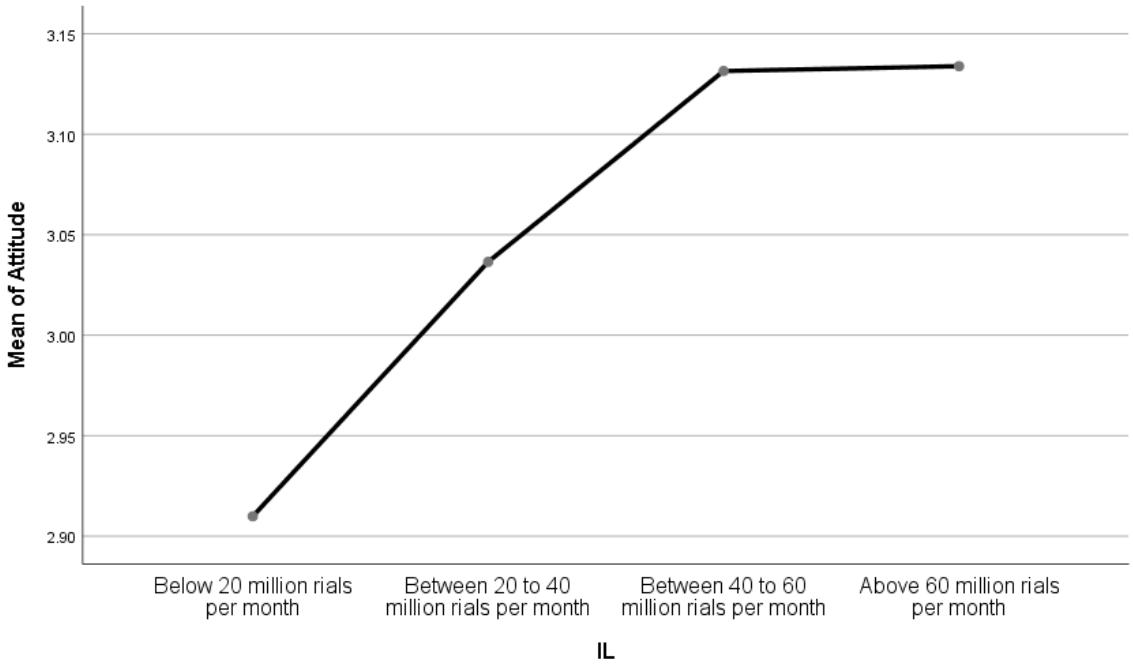

Figure 4.5. The mean of Attitude toward Drug Use by income level

f) Employment status

In this section, we want to explore employment status-based Attitude toward Drug Use. For this purpose, we used analysis of variance (assuming equality of variance between groups).

Table 4.18. Analysis of Variance of Employment status-based Attitude toward Drug Use.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.900	1	.900	1.801	.181
Within Groups	98.985	198	.500		
Total	99.885	199			

As shown in the table above, given that the numerical significance level is greater than 0.05, it can be deduced that the null hypothesis that there is no difference in mean of Employment status-based Attitude toward Drug Use is reasonable and accepted. Therefore, it can be stated that there is no difference in Attitude toward Drug Use based on the Employment status of the subjects.

The Figure 4.6 provides a visual comparison of the mean Attitude toward Drug Use by employment status.

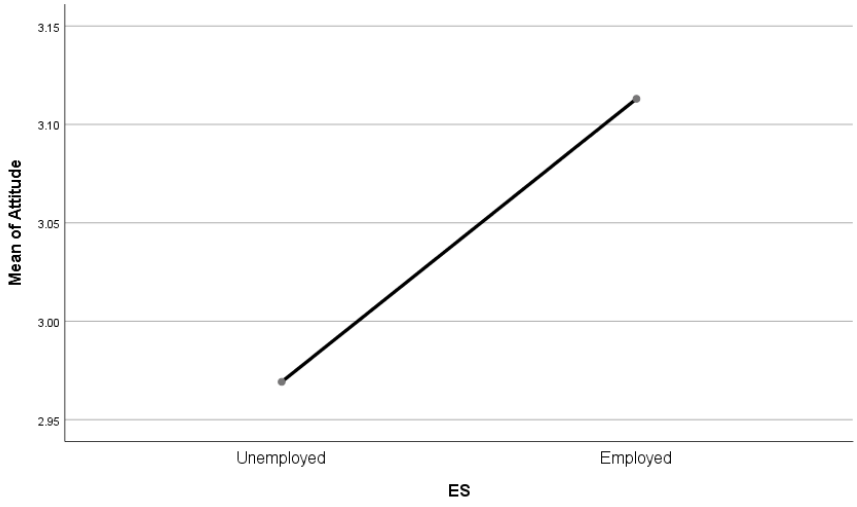

Figure 4.6. The mean of Attitude toward Drug Use by employment status

g) Marital status

In this section, we want to explore marital status-based Attitude toward Drug Use. For this purpose, we used analysis of variance (assuming equality of variance between groups).

Table 4.19. Analysis of Variance of Marital status-based Attitude toward Drug Use.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.283	2	.142	.280	.756
Within Groups	99.602	197	.506		
Total	99.885	199			

As shown in the table above, given that the numerical significance level is greater than 0.05, it can be deduced that the null hypothesis that there is no difference in mean of Marital status-based Attitude toward Drug Use is reasonable and accepted. Therefore, it can be stated that there is no difference in Attitude toward Drug Use based on the marital status of the subjects.

The Figure 4.7 provides a visual comparison of the mean Attitude toward Drug Use by marital status.

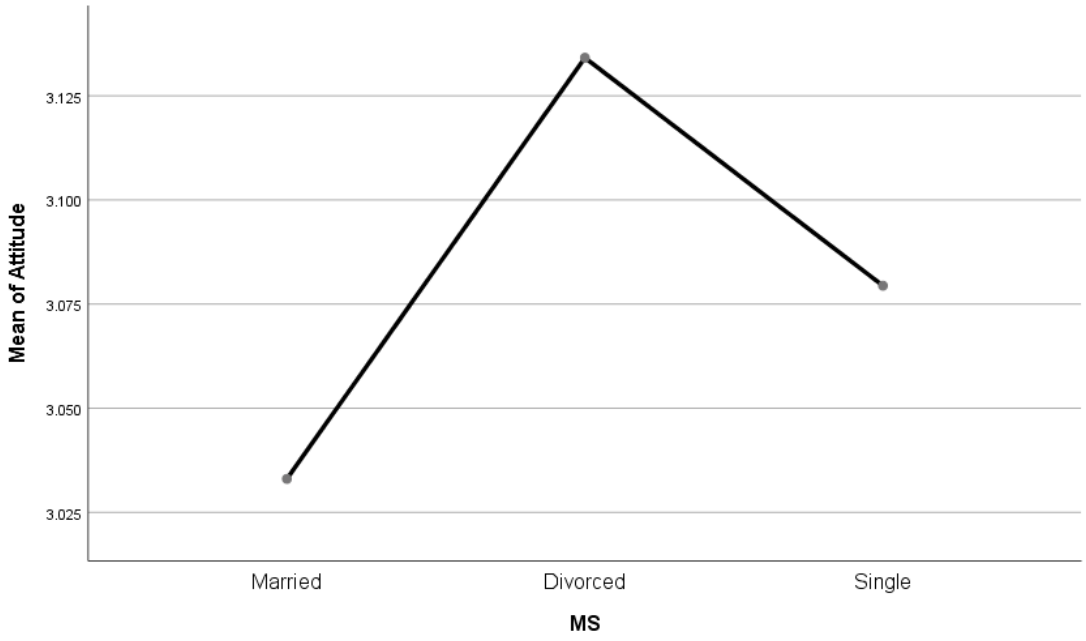

Figure 4.7. The mean of Attitude toward Drug Use by marital status

h) Using different types of substances

In this section, we want to explore using different types of substances-based Attitude toward Drug Use. For this purpose, we used analysis of variance (assuming equality of variance between groups).

Table 4.20. Analysis of Variance of using different types of substances-based Attitude toward Drug Use.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.602	7	.086	.166	.991
Within Groups	99.283	192	.517		
Total	99.885	199			

As shown in the table above, given that the numerical significance level is greater than 0.05, it can be deduced that the null hypothesis that there is no difference in mean of Using different types of substances-based Attitude toward Drug Use is reasonable and accepted. Therefore, it can be stated that there is no difference in Attitude toward Drug Use based on the Using different types of substances of the subjects. The Figure 4.8 provides a visual comparison of the mean Attitude toward Drug Use by using different types of substances.

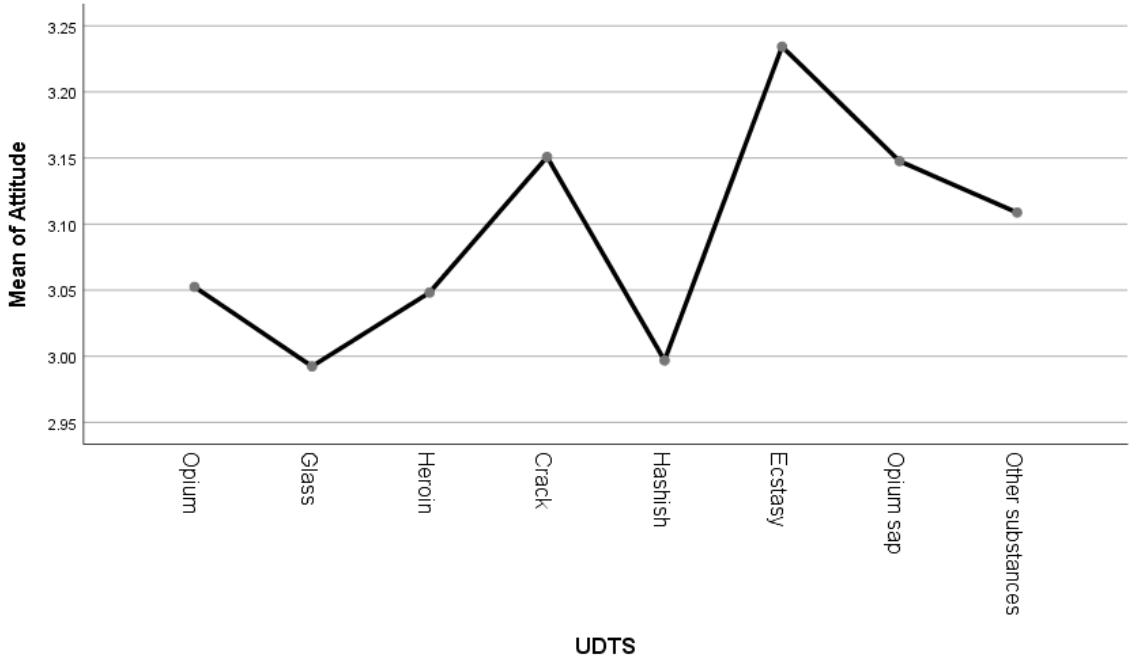

Figure 4.8. The mean of Attitude toward Drug Use by using different types of substances

i) Duration of substance use

In this section, we want to explore duration of substance use-based Attitude toward Drug Use. For this purpose, we used analysis of variance (assuming equality of variance between groups).

Table 4.21. Analysis of Variance of Duration of substance use-based Attitude toward Drug Use.

	Sum of Squares	**df**	**Mean Square**	**F**	**Sig.**
Between Groups	.854	3	.285	.563	.640
Within Groups	99.031	196	.505		
Total	99.885	199			

As shown in the table above, given that the numerical significance level is greater than 0.05, it can be deduced that the null hypothesis that there is no difference in mean of Duration of substance use-based Attitude toward Drug Use is reasonable and accepted. Therefore, it can be stated that there is no difference in Attitude toward Drug Use based on the Duration of substance use of the subjects.

The Figure 4.9 provides a visual comparison of the mean Attitude toward Drug Use by duration of substance use.

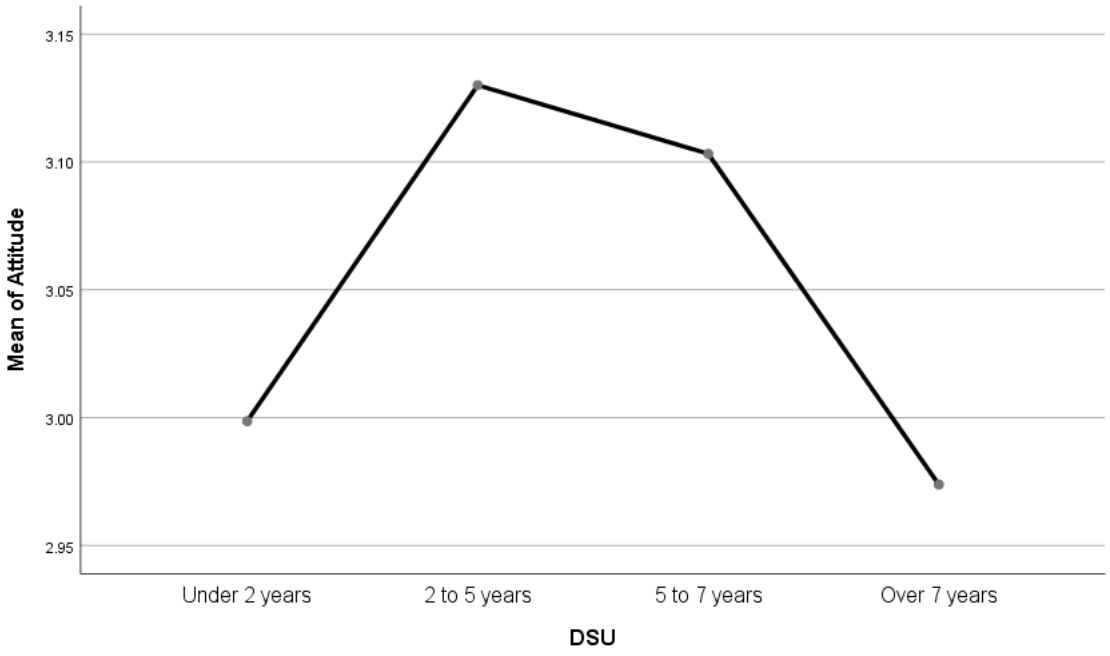

Figure 4.9. The mean of Attitude toward Drug Use by duration of substance use

4.3.2 Assertiveness

a) Gender

In this section, we want to explore gender-based Assertiveness. For this purpose, we used analysis of variance (assuming equality of variance between groups).

Table 4.22. Analysis of Variance of gender-based Assertiveness.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.043	1	.043	.097	.755
Within Groups	87.481	198	.442		
Total	87.524	199			

As shown in the table above, given that the numerical significance level is greater than 0.05, it can be deduced that there is no difference in Assertiveness based on the gender of the subjects.

The Figure 4.10 provides a visual comparison of the mean Assertiveness by gender.

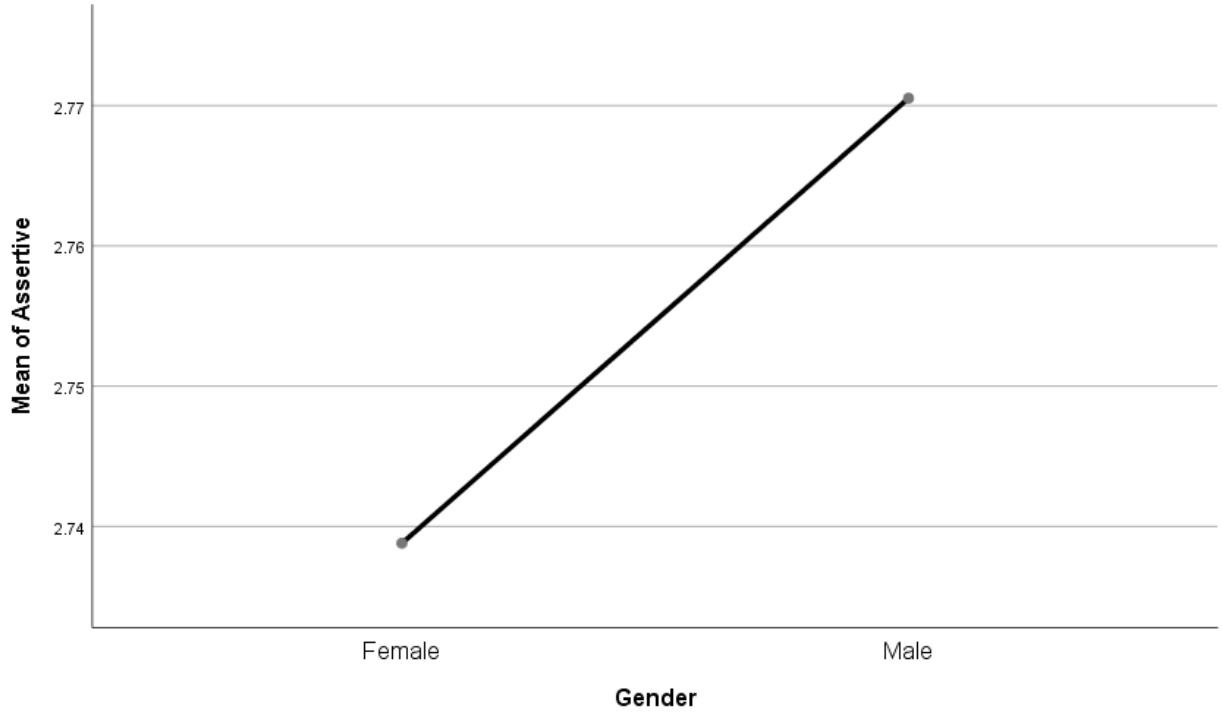

Figure 4.10. The mean of Assertiveness by gender

b) Age

In this section, we want to explore age group-based Assertiveness. For this purpose, we used analysis of variance (assuming equality of variance between groups).

Table 4.23. Analysis of Variance of age group-based Assertiveness.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.989	3	.663	1.519	.211
Within Groups	85.536	196	.436		
Total	87.524	199			

As shown in the table above, given that the numerical significance level is greater than 0.05, it can be deduced that there is no difference in Assertiveness based on the age group of the subjects.

The Figure 4.11 provides a visual comparison of the mean Assertiveness by age group.

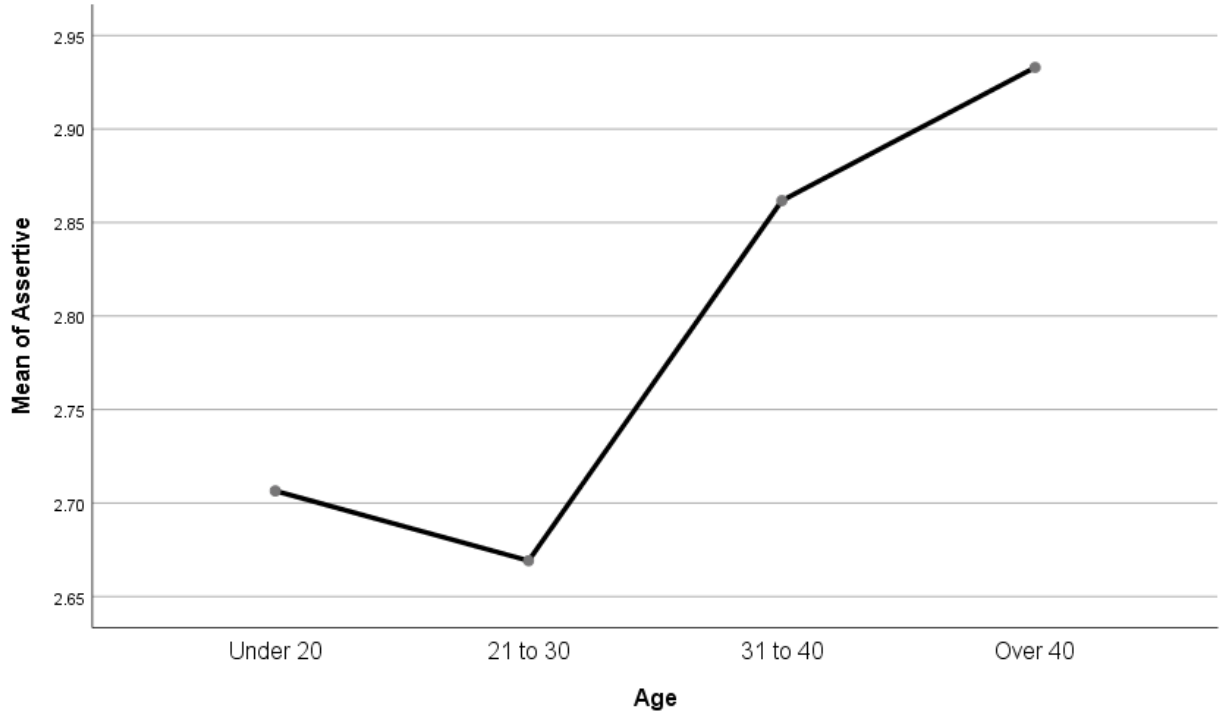

Figure 4.11. The mean of Assertiveness by age group

c) Education

In this section, we want to explore education-based Assertiveness. For this purpose, we used analysis of variance (assuming equality of variance between groups).

Table 4.24. Analysis of Variance of education-based Assertiveness.

	Sum of Squares	**df**	**Mean Square**	**F**	**Sig.**
Between Groups	.546	2	.273	.618	.540
Within Groups	86.979	197	.442		
Total	87.524	199			

As shown in the table above, given that the numerical significance level is greater than 0.05, it can be deduced that there is no difference in Assertiveness based on the education of the subjects.

The Figure 4.12 provides a visual comparison of the mean Assertiveness by education.

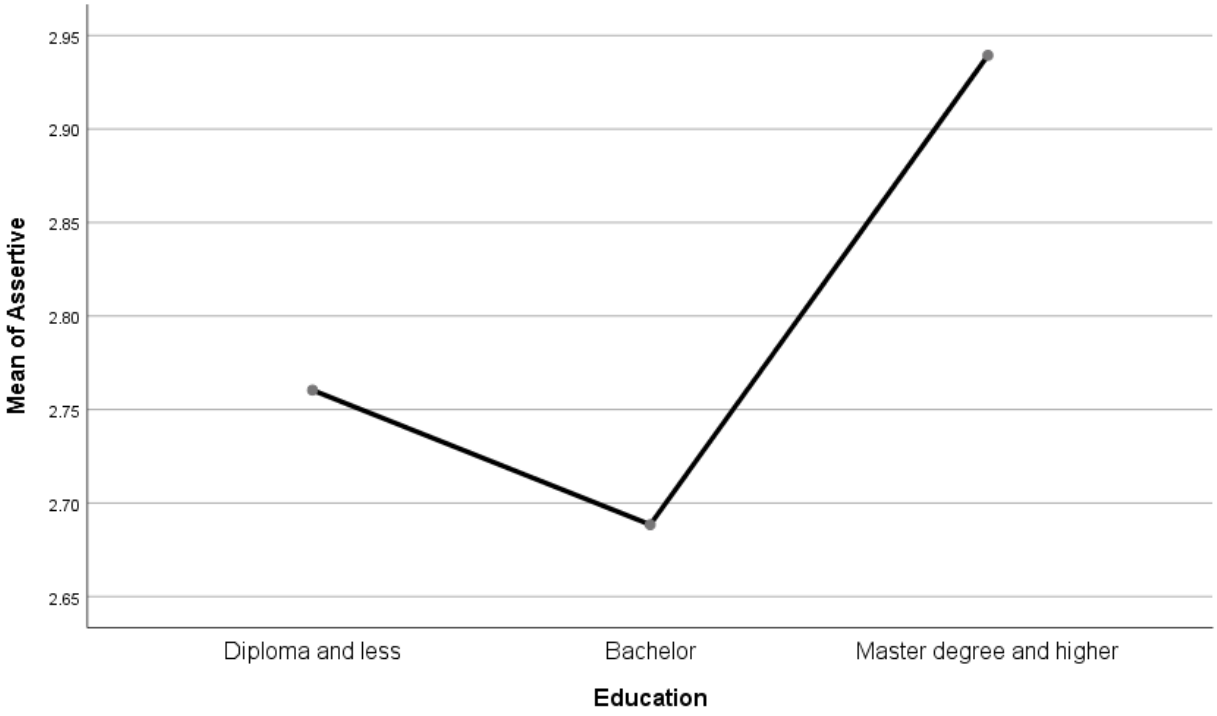

Figure 4.12. The mean of Assertiveness by education

d) Social class

In this section, we want to explore social class-based Assertiveness. For this purpose, we used analysis of variance (assuming equality of variance between groups).

Table 4.25. Analysis of Variance of Social class-based Assertiveness.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.770	2	.385	.874	.419
Within Groups	86.755	197	.440		
Total	87.524	199			

As shown in the table above, given that the numerical significance level is greater than 0.05, it can be deduced that there is no difference in Assertiveness based on the social class of the subjects.

The Figure 4.13 provides a visual comparison of the mean Assertiveness by social class.

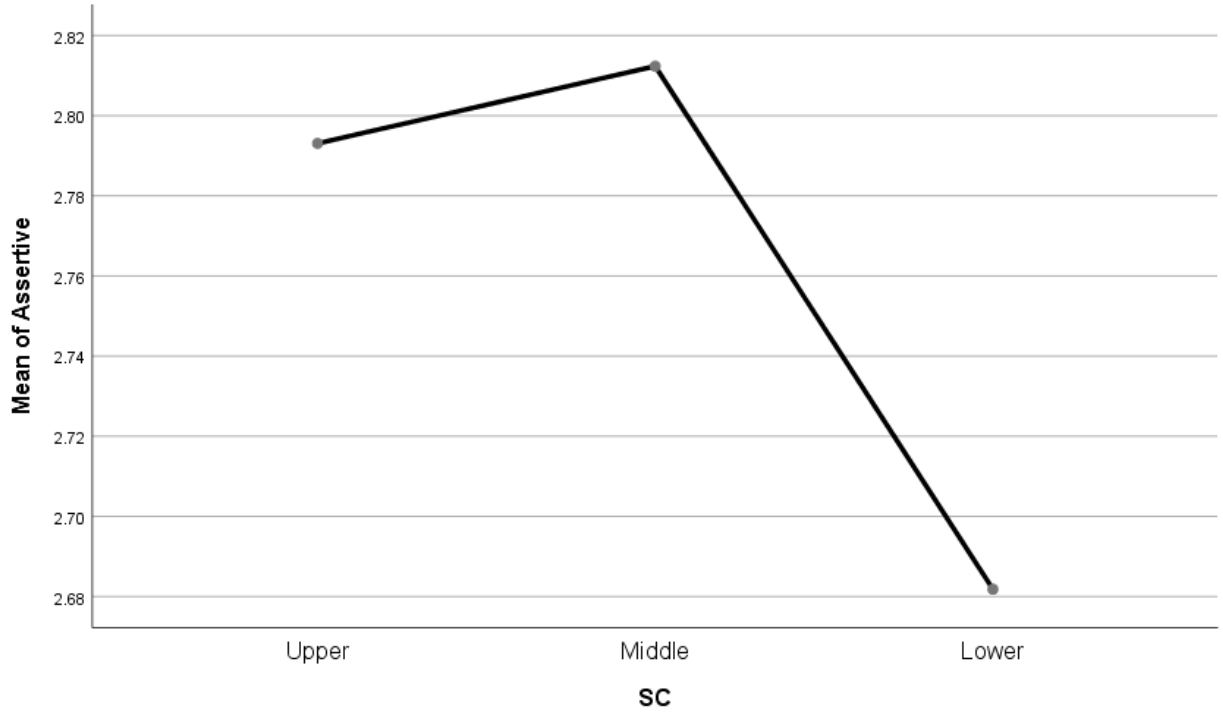

Figure 4.13. The mean of Assertiveness by social class

e) Income level

In this section, we want to explore income level-based Assertiveness. For this purpose, we used analysis of variance (assuming equality of variance between groups).

Table 4.26. Analysis of Variance of Income level-based Assertiveness.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.097	3	.366	.829	.479
Within Groups	86.428	196	.441		
Total	87.524	199			

As shown in the table above, given that the numerical significance level is greater than 0.05, it can be deduced that there is no difference in Assertiveness based on the Income level of the subjects.

The Figure 4.14 provides a visual comparison of the mean Assertiveness by income level.

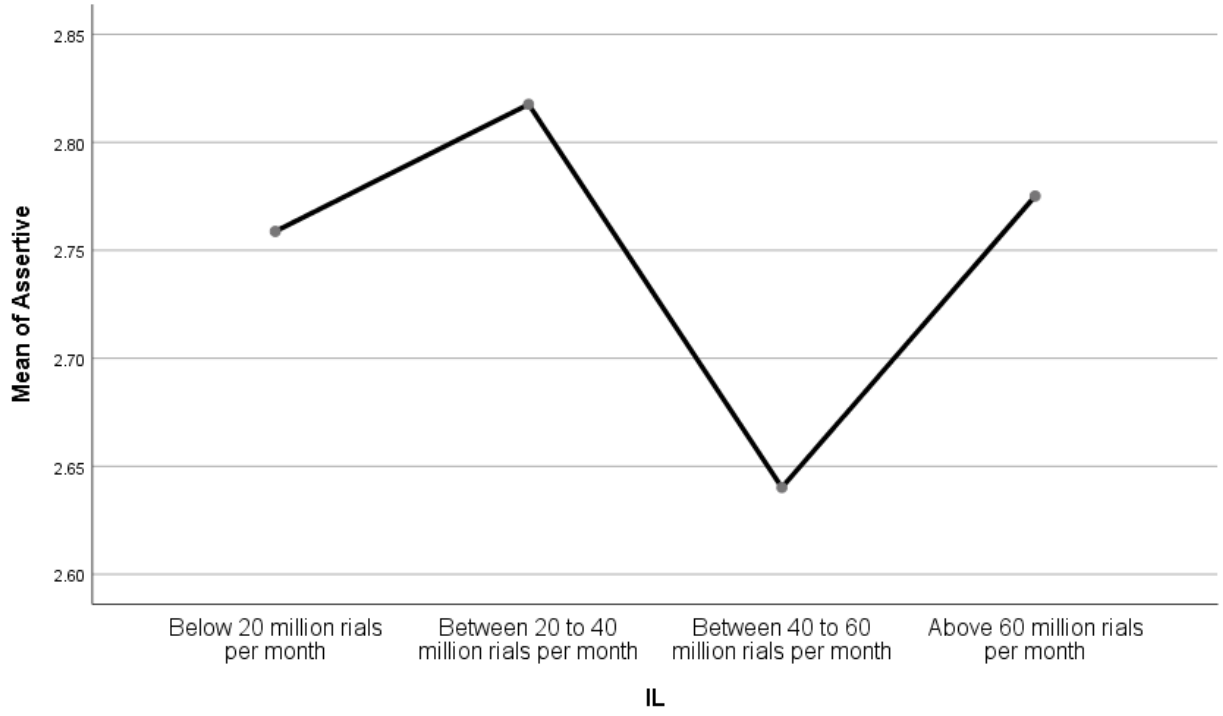

Figure 4.14. The mean of Assertiveness by income level

f) Employment status

In this section, we want to explore employment status-based Assertiveness. For this purpose, we used analysis of variance (assuming equality of variance between groups).

Table 4.27. Analysis of Variance of Employment status-based Assertiveness.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.455	1	.455	1.035	.310
Within Groups	87.069	198	.440		
Total	87.524	199			

As shown in the table above, given that the numerical significance level is greater than 0.05, it can be deduced there is no difference in Assertiveness based on the employment status of the subjects.

The Figure 4.15 provides a visual comparison of the mean Assertiveness by employment status.

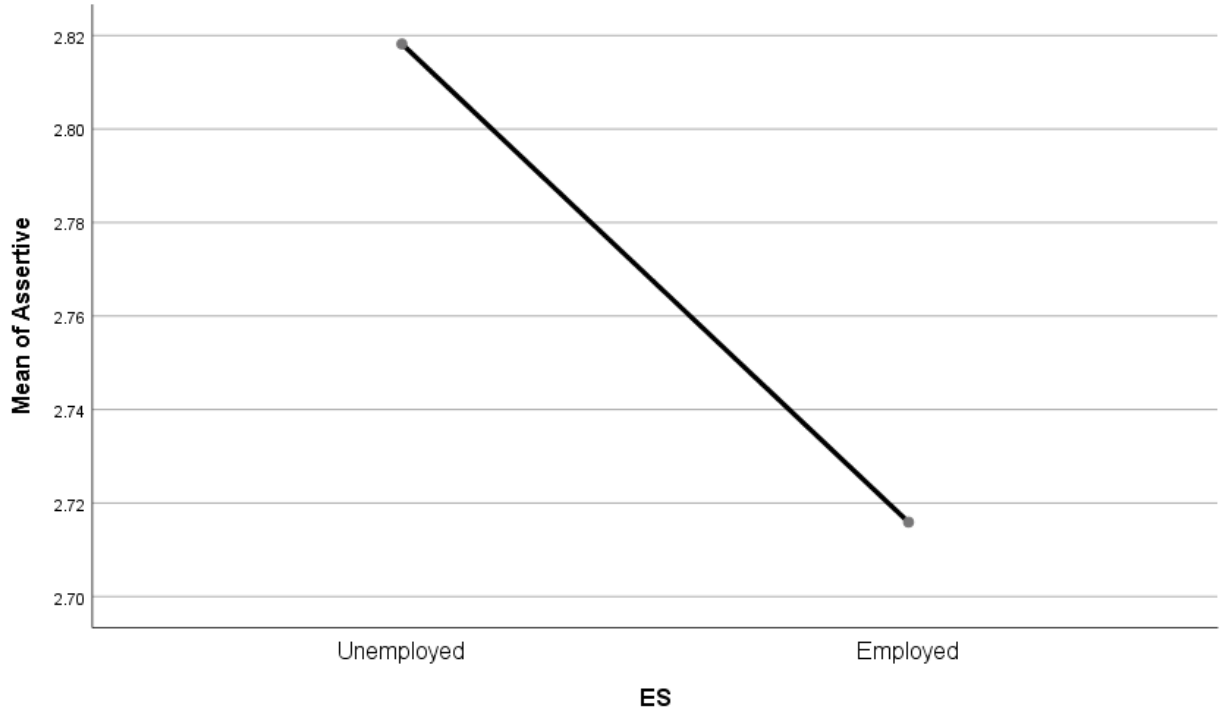

Figure 4.15. The mean of Assertiveness by employment status

g) Marital status

In this section, we want to explore marital status-based Assertiveness. For this purpose, we used analysis of variance (assuming equality of variance between groups).

Table 4.28. Analysis of Variance of Marital status-based Assertiveness.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.181	2	.090	.204	.816
Within Groups	87.344	197	.443		
Total	87.524	199			

As shown in the table above, given that the numerical significance level is greater than 0.05, it can be deduced that there is no difference in Assertiveness based on the marital status of the subjects.

The Figure 4.16 provides a visual comparison of the mean Assertiveness by marital status.

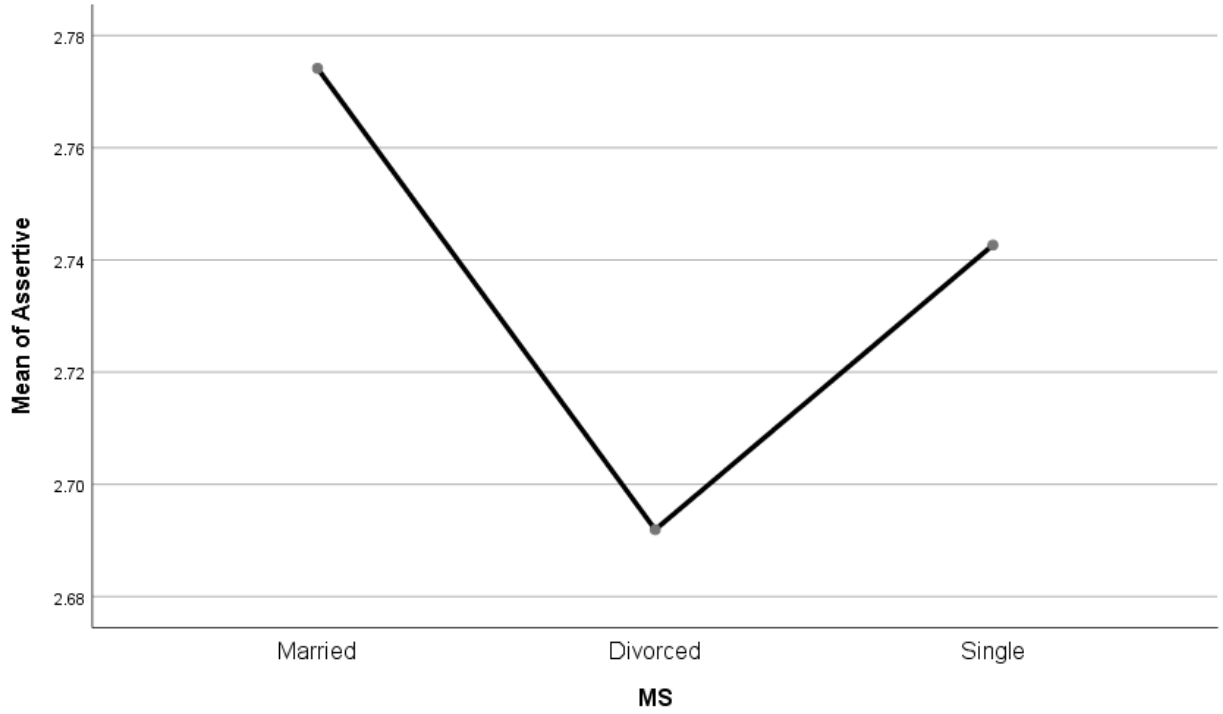

Figure 4.16. The mean of Assertiveness by marital status

h) Using different types of substances

In this section, we want to explore using different types of substances-based Assertiveness. For this purpose, we used analysis of variance (assuming equality of variance between groups).

Table 4.29. Analysis of Variance of using different types of substances-based Assertiveness.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.983	7	.283	.636	.726
Within Groups	85.541	192	.446		
Total	87.524	199			

As shown in the table above, given that the numerical significance level is greater than 0.05, it can be deduced that there is no difference in Assertiveness based on the Using different types of substances of the subjects.

The Figure 4.17 provides a visual comparison of the mean Assertiveness by using different types of substances.

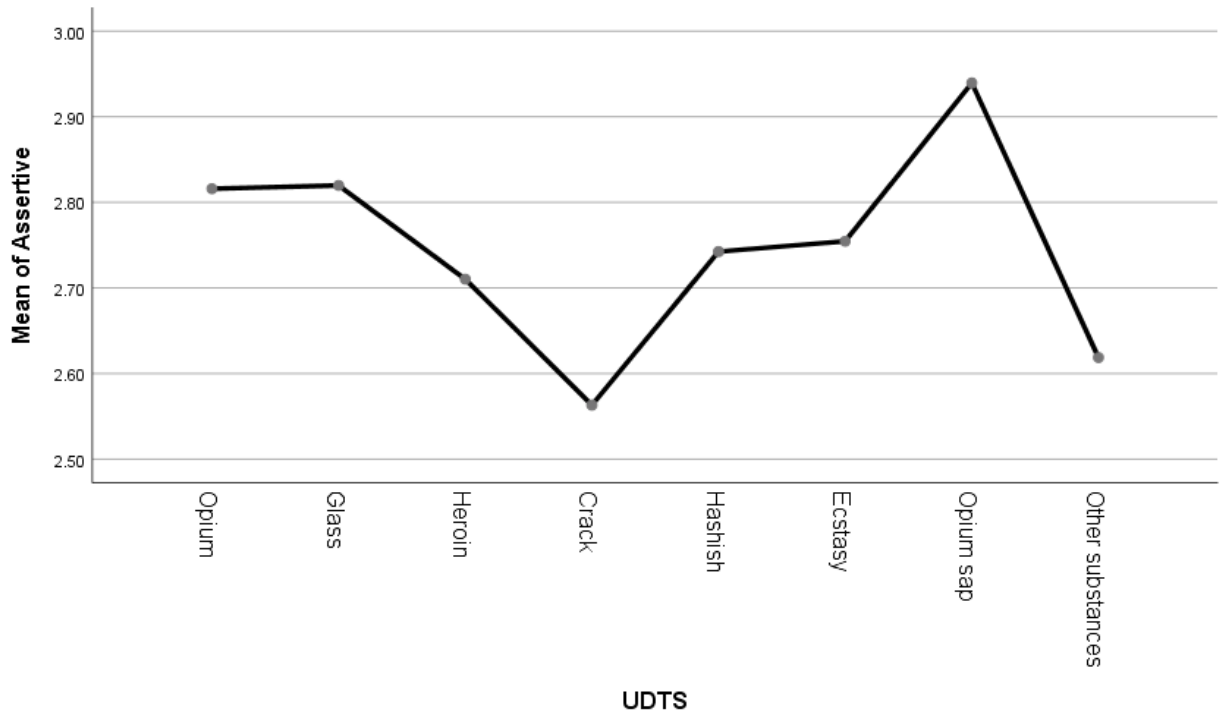

Figure 4.17. The mean of Assertiveness by using different types of substances

i) Duration of substance use

In this section, we want to explore duration of substance use-based Assertiveness. For this purpose, we used analysis of variance (assuming equality of variance between groups).

Table 4.30. Analysis of Variance of Duration of substance use-based Assertiveness.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.542	3	.514	1.172	.322
Within Groups	85.982	196	.439		
Total	87.524	199			

As shown in the table above, given that the numerical significance level is greater than 0.05, it can be deduced that there is no difference in Assertiveness based on the Duration of substance use of the subjects.

The Figure 4.18 provides a visual comparison of the mean Assertiveness by duration of substance use.

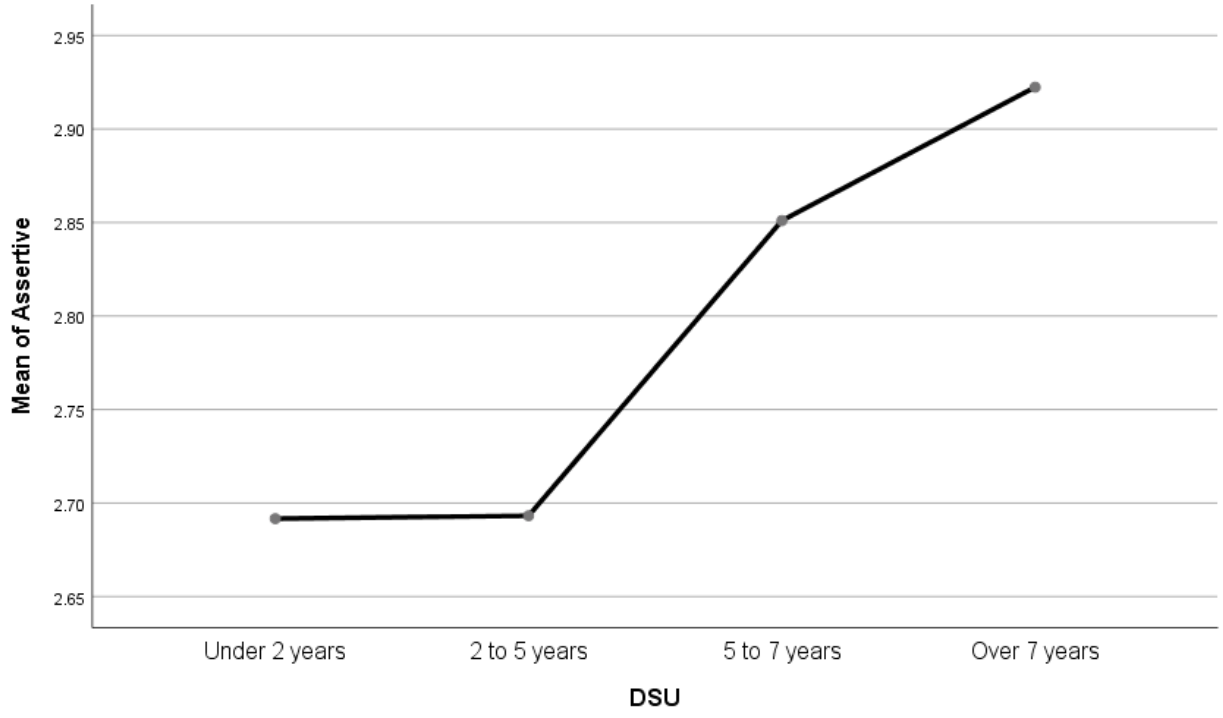

Figure 4.18. The mean of Assertiveness by duration of substance use

4.3.3 Hardiness

a) Gender

In this section, we want to explore gender-based Hardiness. For this purpose, we used analysis of variance (assuming equality of variance between groups).

Table 4.31. Analysis of Variance of gender-based Hardiness.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.015	1	.015	.079	.779
Within Groups	37.164	198	.188		
Total	37.179	199			

As shown in the table above, given that the numerical significance level is greater than 0.05, it can be deduced that there is no difference in Hardiness based on the gender of the subjects.

The Figure 4.19 provides a visual comparison of the mean Hardiness by gender.

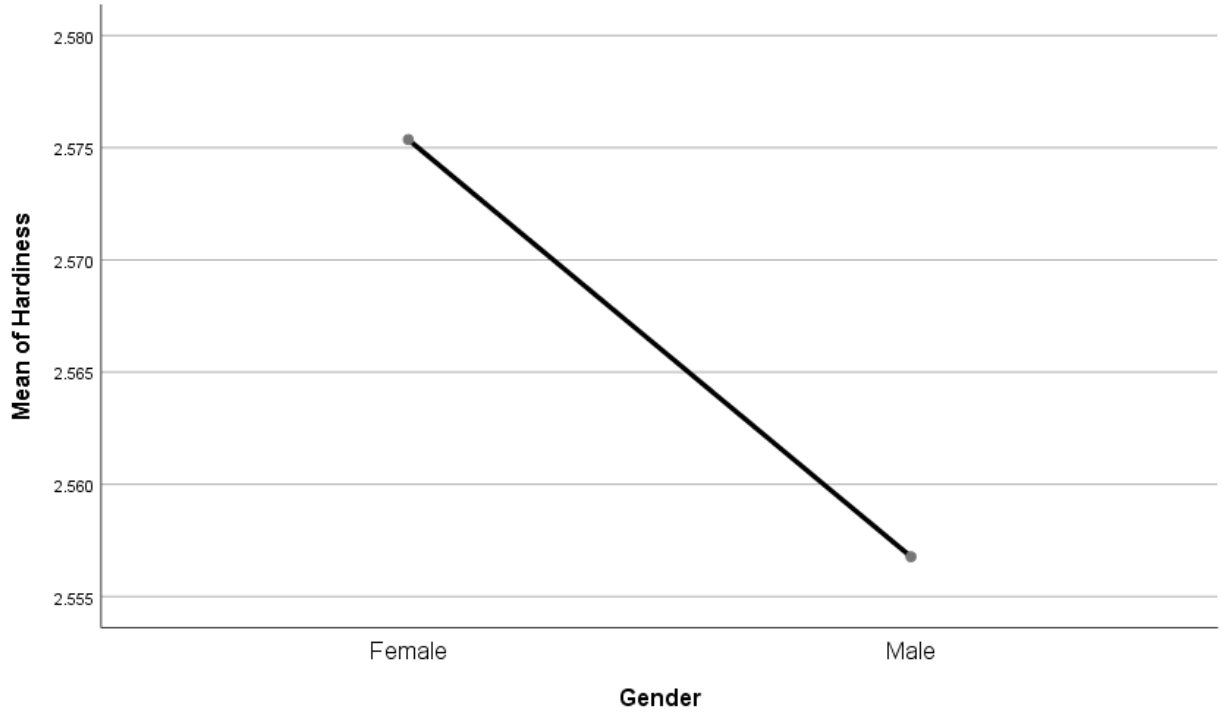

Figure 4.19. The mean of Hardiness by gender

b) Age

In this section, we want to explore age group-based Hardiness. For this purpose, we used analysis of variance (assuming equality of variance between groups).

Table 4.32. Analysis of Variance of age group-based Hardiness.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.495	3	.165	.882	.451
Within Groups	36.684	196	.187		
Total	37.179	199			

As shown in the table above, given that the numerical significance level is greater than 0.05, it can be deduced that there is no difference in Hardiness based on the age group of the subjects.

The Figure 4.20 provides a visual comparison of the mean Hardiness by age group.

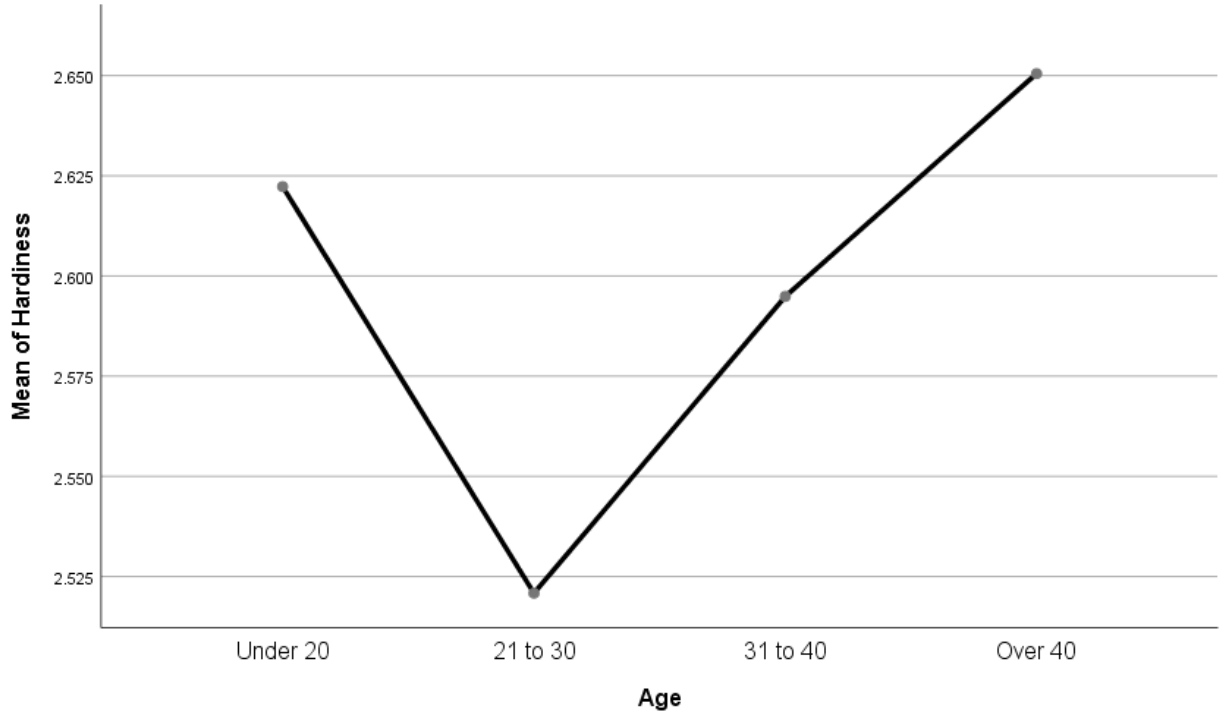

Figure 4.20. The mean of Hardiness by age group

c) Education

In this section, we want to explore education-based Hardiness. For this purpose, we used analysis of variance (assuming equality of variance between groups).

Table 4.33. Analysis of Variance of education-based Hardiness.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.043	2	.022	.115	.892
Within Groups	37.136	197	.189		
Total	37.179	199			

As shown in the table above, given that the numerical significance level is greater than 0.05, it can be deduced that there is no difference in Hardiness based on the education of the subjects.

The Figure 4.21 provides a visual comparison of the mean Hardiness by education.

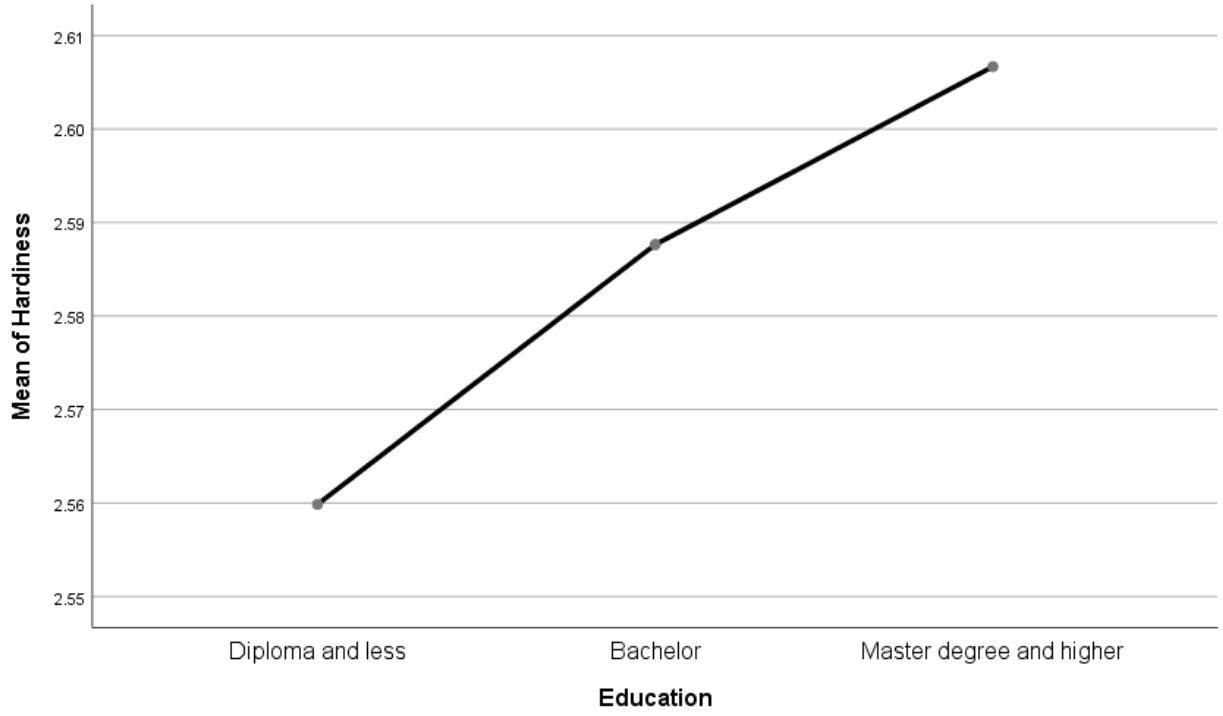

Figure 4.21. The mean of Hardiness by education

d) Social class

In this section, we want to explore social class-based Hardiness. For this purpose, we used analysis of variance (assuming equality of variance between groups).

Table 4.34. Analysis of Variance of Social class-based Hardiness.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.428	2	.214	1.147	.320
Within Groups	36.751	197	.187		
Total	37.179	199			

As shown in the table above, given that the numerical significance level is greater than 0.05, it can be deduced that there is no difference in Hardiness based on the social class of the subjects.

The Figure 4.22 provides a visual comparison of the mean Hardiness by social class.

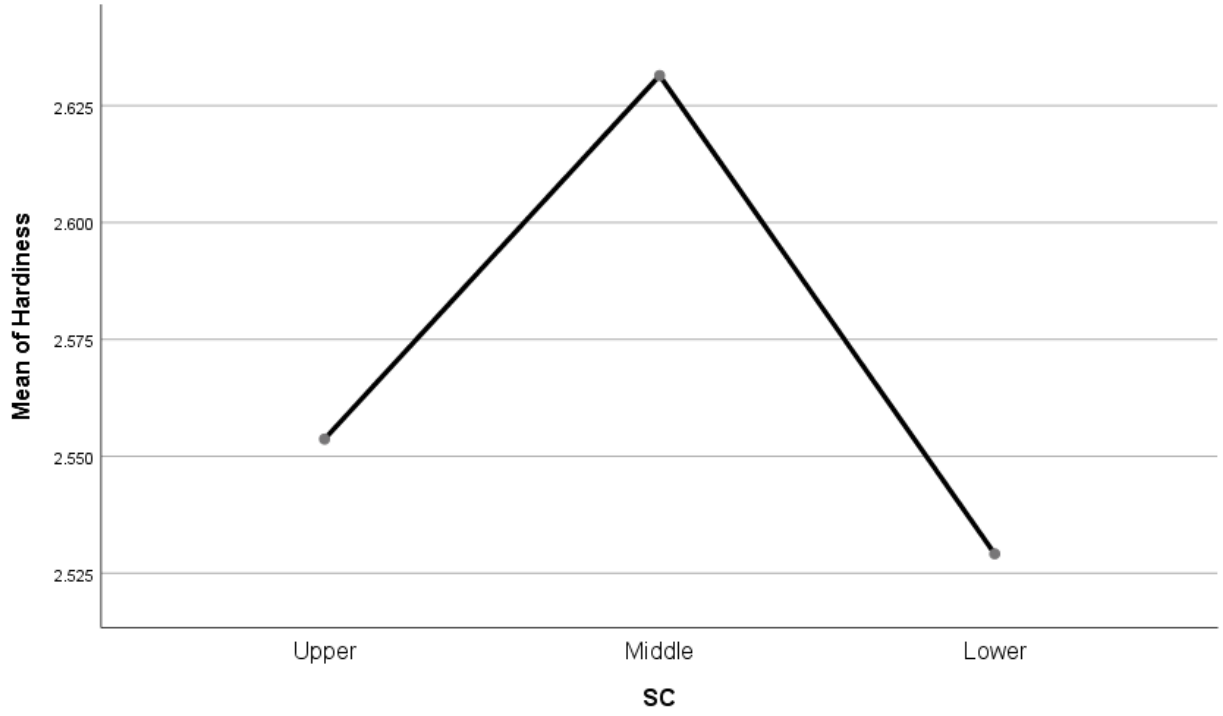

Figure 4.22. The mean of Hardiness by social class

e) Income level

In this section, we want to explore income level-based Hardiness. For this purpose, we used analysis of variance (assuming equality of variance between groups).

Table 4.35. Analysis of Variance of Income level-based Hardiness.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.486	3	.162	.866	.460
Within Groups	36.693	196	.187		
Total	37.179	199			

As shown in the table above, given that the numerical significance level is greater than 0.05, it can be deduced that there is no difference in Hardiness based on the Income level of the subjects.

The Figure 4.23 provides a visual comparison of the mean Hardiness by income level.

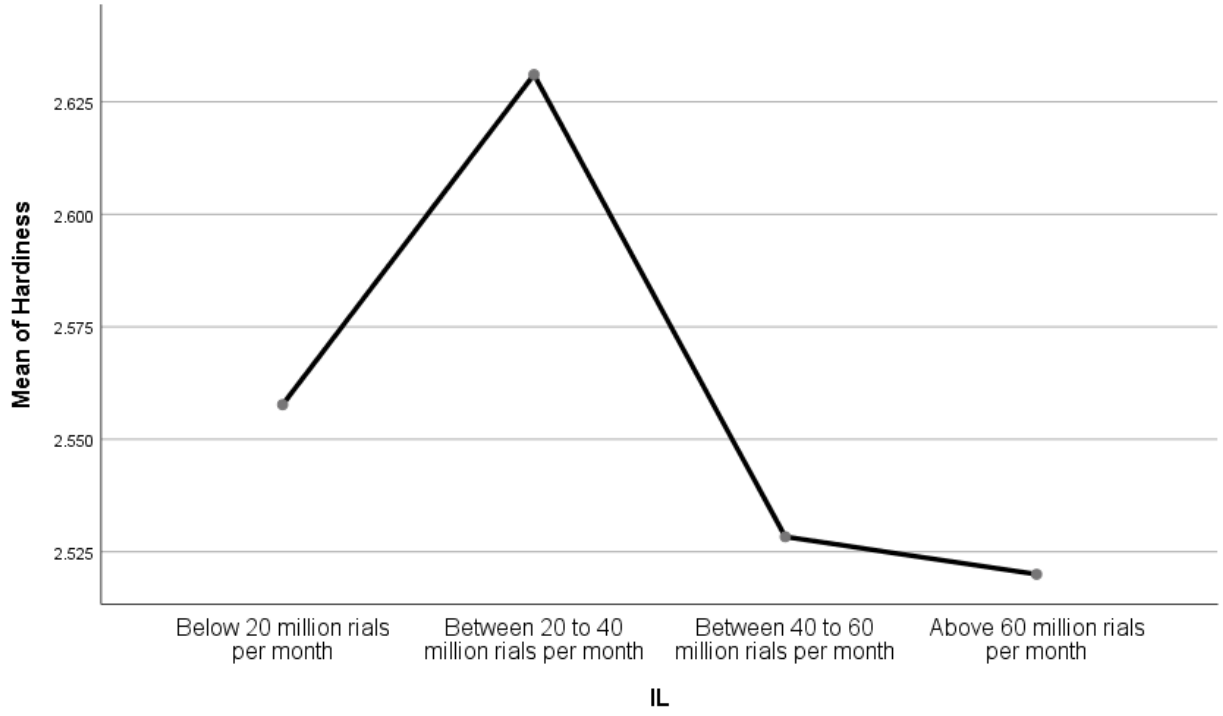

Figure 4.23. The mean of Hardiness by income level

f) Employment status

In this section, we want to explore employment status-based Hardiness. For this purpose, we used analysis of variance (assuming equality of variance between groups).

Table 4.36. Analysis of Variance of Employment status-based Hardiness.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.202	1	.202	1.082	.299
Within Groups	36.977	198	.187		
Total	37.179	199			

As shown in the table above, given that the numerical significance level is greater than 0.05, it can be deduced there is no difference in Hardiness based on the employment status of the subjects.

The Figure 4.24 provides a visual comparison of the mean Hardiness by employment status.

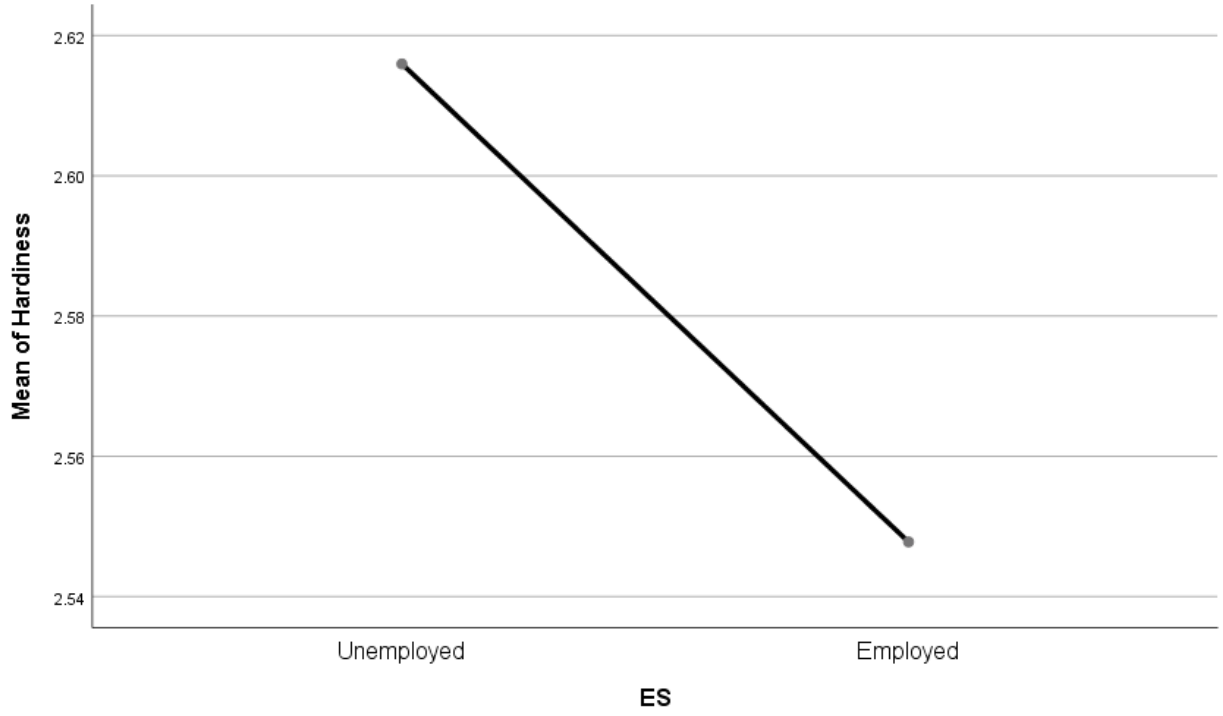

Figure 4.24. The mean of Hardiness by employment status

g) Marital status

In this section, we want to explore marital status-based Hardiness. For this purpose, we used analysis of variance (assuming equality of variance between groups).

Table 4.37. Analysis of Variance of Marital status-based Hardiness.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.221	2	.111	.590	.555
Within Groups	36.958	197	.188		
Total	37.179	199			

As shown in the table above, given that the numerical significance level is greater than 0.05, it can be deduced that there is no difference in Hardiness based on the marital status of the subjects.

The Figure 4.25 provides a visual comparison of the mean Hardiness by marital status.

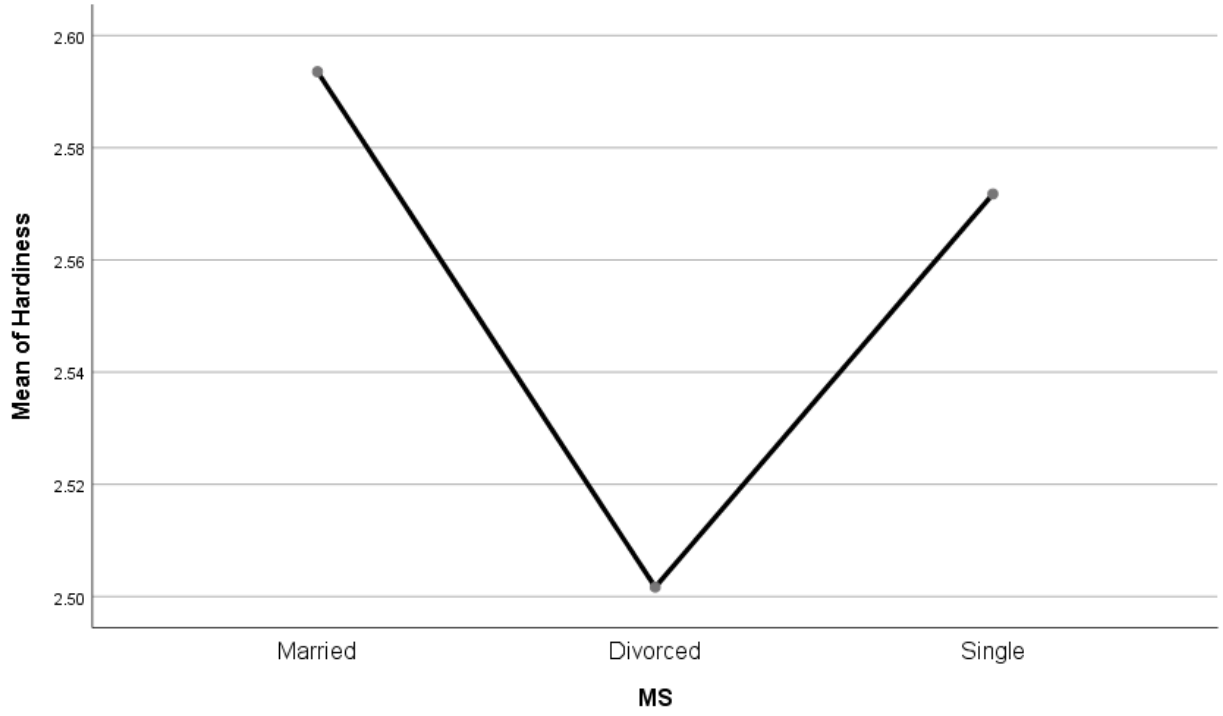

Figure 4.25. The mean of Hardiness by marital status

h) Using different types of substances

In this section, we want to explore using different types of substances-based Hardiness. For this purpose, we used analysis of variance (assuming equality of variance between groups).

Table 4.38. Analysis of Variance of using different types of substances-based Hardiness.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.622	7	.089	.467	.858
Within Groups	36.557	192	.190		
Total	37.179	199			

As shown in the table above, given that the numerical significance level is greater than 0.05, it can be deduced that there is no difference in Hardiness based on the Using different types of substances of the subjects.

The Figure 4.26 provides a visual comparison of the mean Hardiness by using different types of substances.

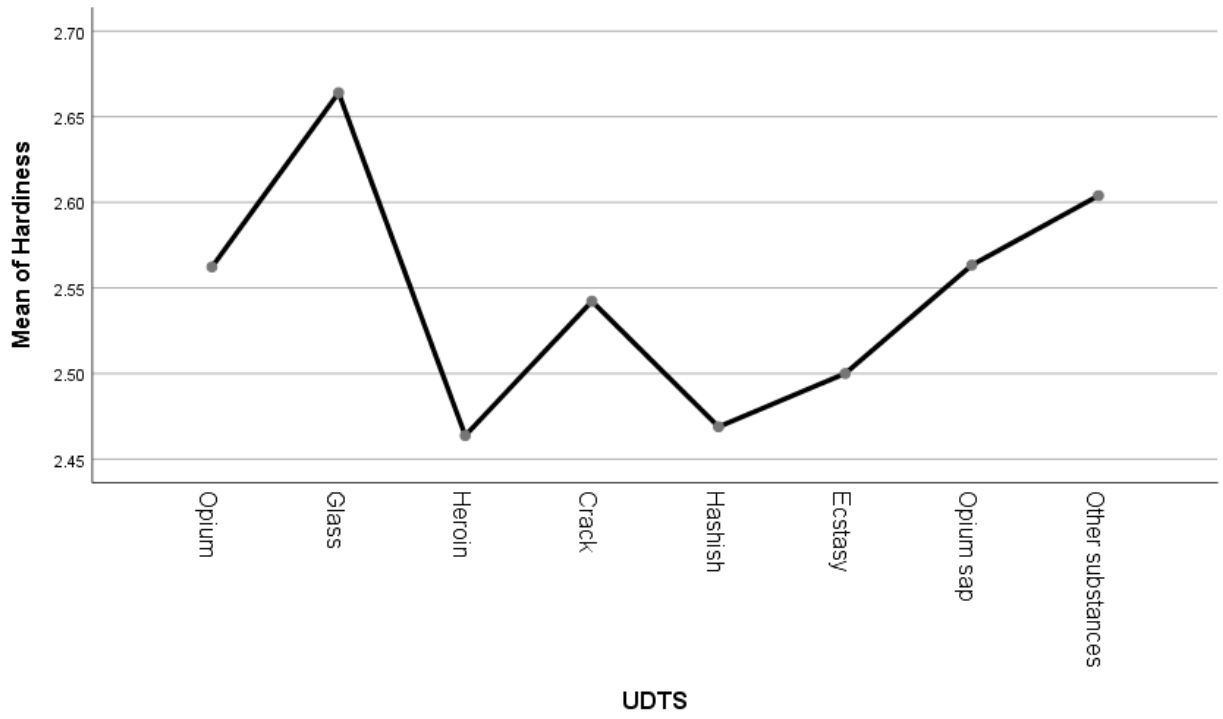

Figure 4.26. The mean of Hardiness by using different types of substances

i) Duration of substance use

In this section, we want to explore duration of substance use-based Hardiness. For this purpose, we used analysis of variance (assuming equality of variance between groups).

Table 4.39. Analysis of Variance of Duration of substance use-based Hardiness.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.499	3	.166	.889	.448
Within Groups	36.680	196	.187		
Total	37.179	199			

As shown in the table above, given that the numerical significance level is greater than 0.05, it can be deduced that there is no difference in Hardiness based on the Duration of substance use of the subjects.

The Figure 4.27 provides a visual comparison of the mean Hardiness by duration of substance use.

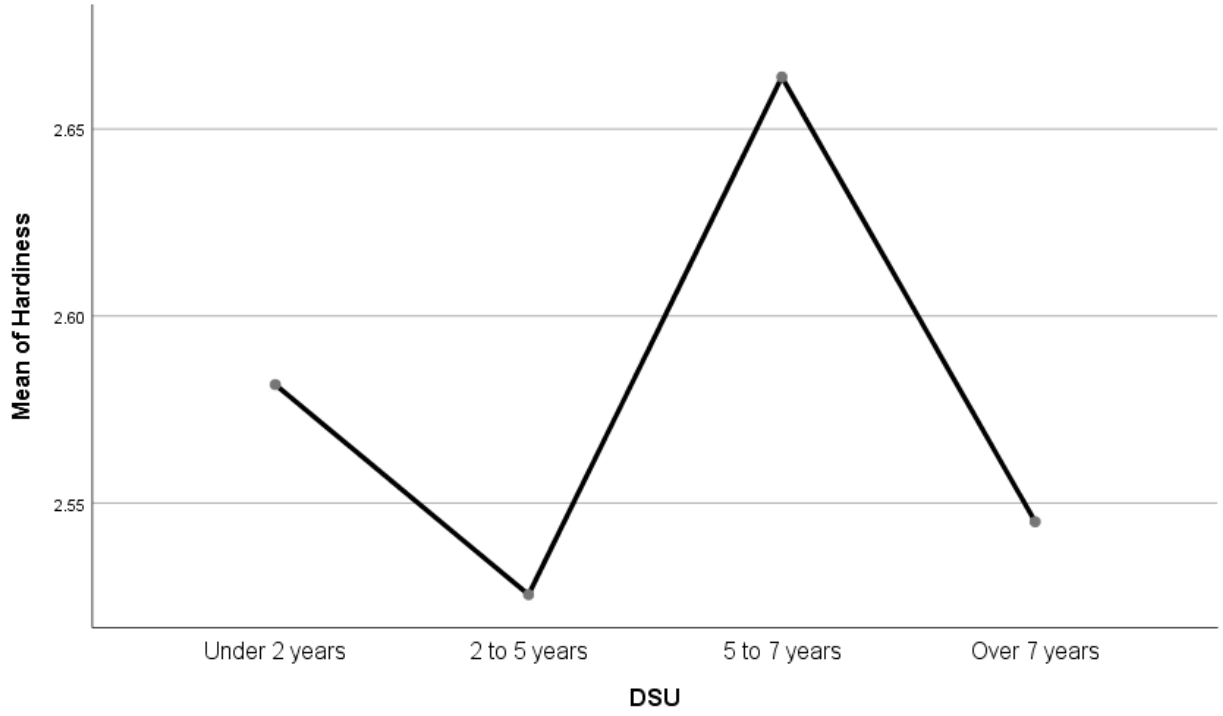

Figure 4.27. The mean of Hardiness by duration of substance use

4.4 Attitude towards Drug Use and Psychological Hardiness.

In the Table 4.40, the amount of correlation between predictor variable Psychological Hardiness and the dependent variable Attitude towards Drug Use has been calculated.

Table 4.40. The Correlation between Psychological Hardiness and Attitude towards Drug Use

		Hardiness
Attitude	Pearson Correlation	-.709**
	Sig. (2-tailed)	.000
	N	200

According to the above table, there is a negative and significant relationship between Psychological Hardiness with a level of 0.000 and Attitude towards Drug Use; in other words, with increasing it, the amount of Attitude towards Drug Use decreases; the severity of this relationship is visible in the above.

In order to investigate the relationship between the predictor and the Attitude toward Drug Use in a model, linear regression test was used; however, before performing the calculations, the assumptions of this test are examined.

Independence of Error Expression

Independence of errors was evaluated using Durbin-Watson statistic, which was calculated as 1.671. The concept of independence means that the outcome of an observation does not have an effect on the outcome of other observations. In regression, most of the time when the behaviour of the dependent variable is studied over a period of time, we may deal with the problem of the independence of the errors; this kind of relation is called Autocorrelation in the data. Linear regression cannot be used if there is an error correlation. Durbin-Watson statistic is a value between 0 and 4. If, there is no consecutive correlations among the residuals, the value of this statistic should be close to 2. If it is close to zero, it represents a positive correlation and, if close to 4, indicates a negative correlation.

As shown in the Figure 4.28 below, the relationship between the predictor and dependent variable seems to be more or less linear.

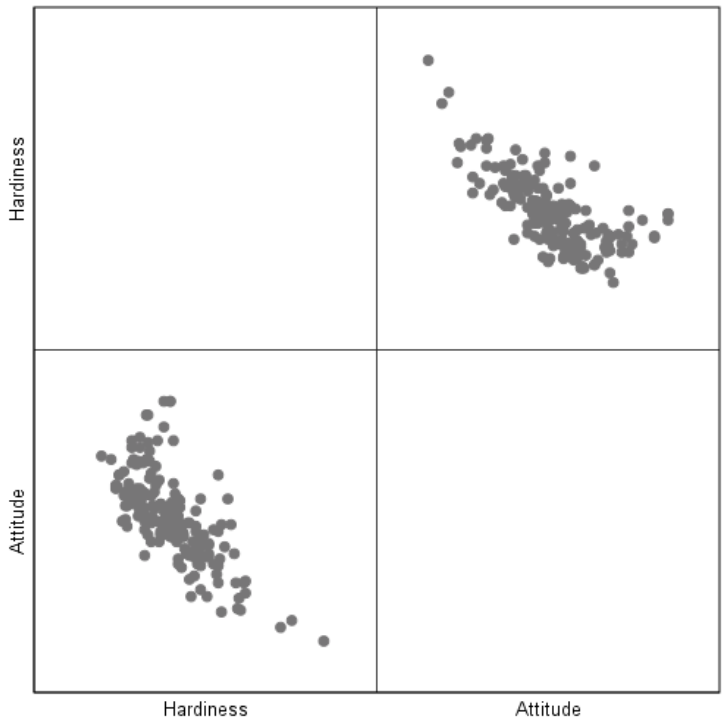

Figure 4.28. Scatter Figure of Psychological Hardiness and Attitude towards Drug Use

Normality of Error Expression

This hypothesis was investigated by Figure 4.29 ting histogram of the residuals.

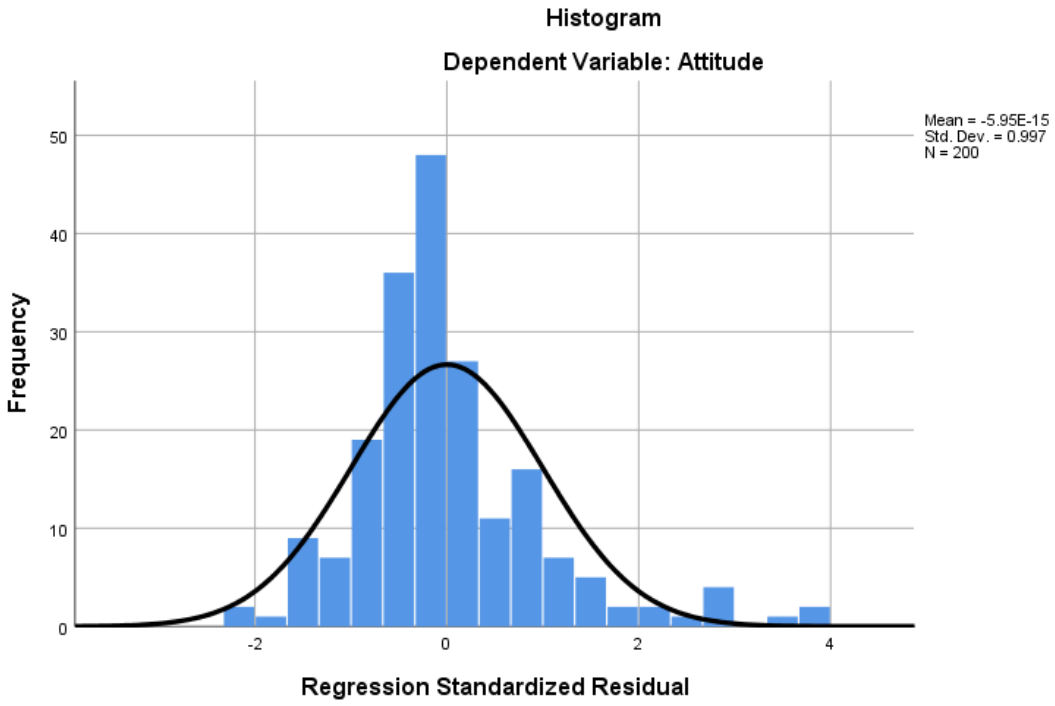

Figure 4.29. Histogram to examine the assumption that the error expression has Normal distribution

As shown in the diagram above, the distribution Figure 4.29 is almost Normal.

After reviewing the assumptions above and confirming applying of regression, linear regression is fitted to the data, the results are shown below.

Table 4.41. Regression test to investigate the relationship between Psychological Hardiness and Attitude towards Drug Use

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.709[1]	.503	.501	.50061	1.671

According to the above table, the relationship between Psychological Hardiness and Attitude towards Drug Use is -0.709; In other words, Psychological Hardiness accounts for about 50 percent

[1] Predictor variable (constant) - Psychological Hardiness

of the changes in Attitude towards Drug Use (R^2 = 0.501). The following output shows the regression coefficients of the model.

Table 4.42. Coefficients in the prediction of Attitude toward Drug Use by Psychological Hardiness

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	6.055	.214		28.305	.000
	Hardiness	-1.163	.082	-.709	-14.162	.000

Dependent Variable: Attitude

The results of the above table indicate that Psychological Hardiness is a significant predictor of Attitude towards Drug Use. Therefore, based on the data in the table, the regression equation can be written as follows:

Attitude towards Drug Use *= 6.055 – 1.163 (Hardiness)*

4.5 Attitude towards Drug Use and Assertiveness.

In the table below, the correlation between the predictor Assertiveness and the dependent variable Attitude towards Drug Use has been calculated.

Table 4.43. The Correlation between Assertiveness and Attitude towards Drug Use

		Assertiveness
Attitude	Pearson Correlation	-.791**
	Sig. (2-tailed)	.000
	N	200

According to the above table, there is a negative and significant relationship between Assertiveness and Attitude towards Drug Use at the level of 0.01; in other words, by increasing it, the amount of Attitude toward Drug Use decreases, which intensity of this relationship is visible in the table above.

In order to investigate the relationship between the predictor and Attitude towards Drug Use in a model, linear regression test was used; however, before performing the calculations, the assumptions of this test are examined.

Independence of Error Expression

Independence of errors was evaluated using Durbin-Watson statistic, which was calculated to be 1.469.

As shown in the Figure 4.30 below, the relationship between the predictor and dependent variable seems to be more or less linear.

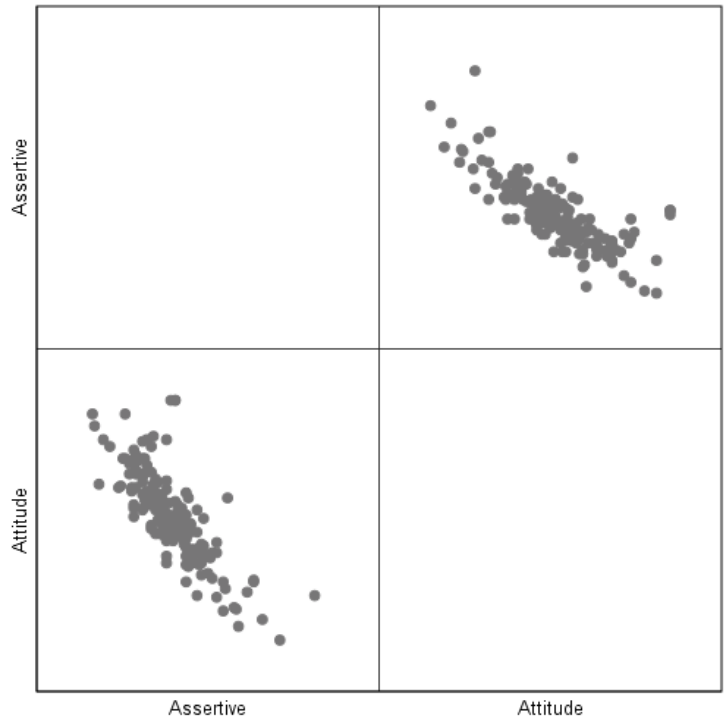

Figure 4.30. Scatter Figure of Assertiveness and Attitude towards Drug Use

Normality of Error Expression

This hypothesis was investigated by Figure 4.30 ting histogram of the residuals.

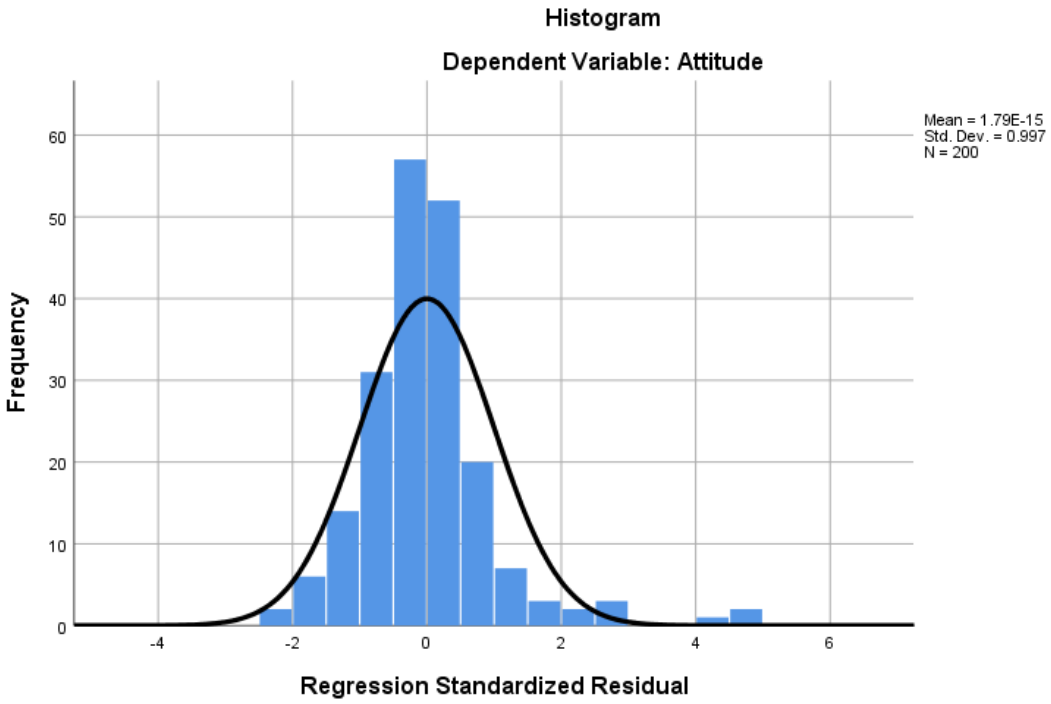

Figure 4.31. Histogram to examine the assumption that the Error expression has Normal distribution

As shown in the diagram above, the distribution Figure 4.31 is almost Normal.

After reviewing the assumptions above and confirming applying of regression, linear regression is fitted to the data, the results are shown below.

Table 4.44. Regression test to investigate the relationship between Assertiveness and Attitude towards Drug Use

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.791[1]	.625	.623	.43473	1.469

According to the above table, the relationship between Assertiveness and Attitude towards Drug Use is -0.791; in other words, Assertiveness accounts for approximately 62% of the changes in Attitude toward Drug Use ($R^2 = 0.625$). The following output shows the regression coefficients of the model.

[1] Predictor variable (constant) – Assertiveness

Table 4.45. Coefficients in the prediction of Attitude toward Drug Use

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.389	.131		41.022	.000
	Assertiveness	-.845	.046	-.791	-18.180	.000

The results of the above table indicate that Assertiveness is a significant predictor of Attitude toward Drug Use. Therefore, based on the data in the table, the regression equation can be written as follows:

Attitude toward Drug Use *= 5.389 – 0.845 (Assertiveness)*

4.6 Psychological Hardiness and Assertiveness related with attitude towards.

In order to investigate the relationship between the predictor and the Attitude towards Drug Use in a model, Multiple Regression test were used; however, before performing the calculations, the assumptions of this test are examined.

Independence of Error Expression

Independence of errors was evaluated using Durbin-Watson statistic, which was calculated to be 1.472.

As shown in the Figure 4.32 below, the relationship between the predictors and dependent variable seems to be more or less linear.

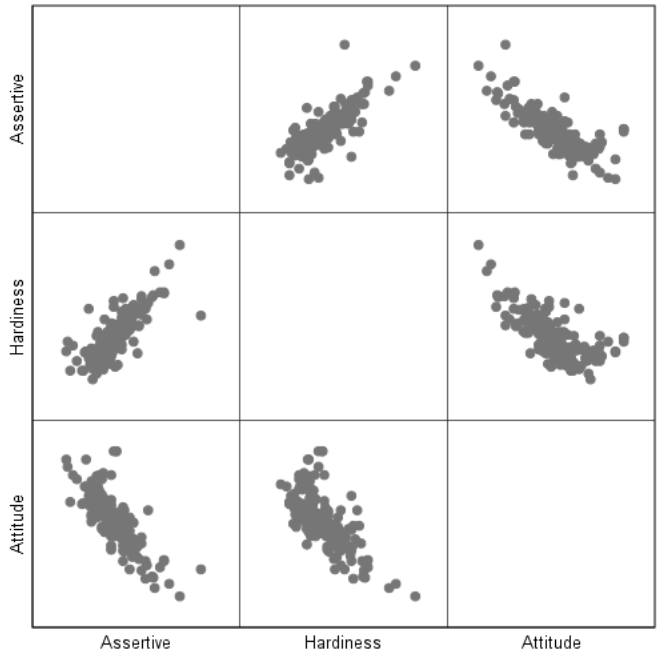

Figure 4.32. Scatter Figure of the predictors and Attitude towards Drug Use

Normality of Error Expression

This hypothesis was investigated by Figure 4.33 ting histogram of the residuals.

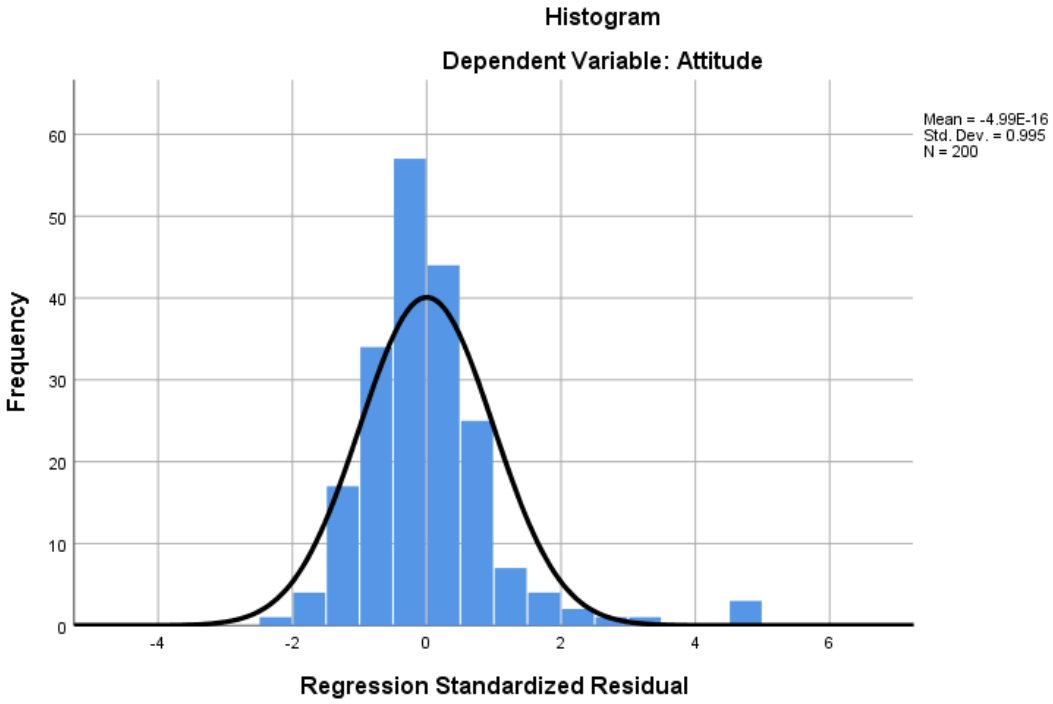

Figure 4.33. Histogram to examine the assumption that the Error expression has Normal distribution

As shown in the diagram above, the distribution Figure 4.33 is almost Normal.

Collinearity Test

This assumption was investigated by using a collinearity test. The value of its coefficient of tolerance for Assertiveness and Psychological Hardiness is 0.386, indicating that the degree of collinearity is low .After reviewing the assumptions above and confirming applying of regression, linear regression is fitted to the data, the results are shown below.

Table 4.46. Regression test to investigate the relationship between predictors and Attitude towards Drug Use

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.804[1]	.646	.643	.423	1.472

According to the above table, the relationship between predictors and Attitude towards Drug Use is 0.804; in other words, they account for approximately 65% of the changes in Attitude toward Drug Use ($R^2 = 0.646$). Also, the related calculations to F showed in Table 4.46, that the squared correlation was significant at 0.01 (Sig. = 0.000, df = 2 and 197 and F = 179.926). The following output shows the regression coefficients of the model.

Table 4.47. Coefficients of the predictors.

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.833	.183		31.933	.000
	Assertiveness	-.650	.073	-.609	-8.923	.000
	Hardiness	-.381	.112	-.232	-3.408	.001

The results of the above table indicate that Assertiveness and Psychological Hardiness are significant predictors of Attitude towards Drug Use. Therefore, based on the data in the table, the regression equation can be written as follows:

Attitude toward Drug Use *= 5.833 – 0.650 (Assertiveness) – 0.381 (Hardiness)*

[1] Predictor variable (constant) - Assertiveness and Psychological Hardiness.

Chapter 5

Discussion

The present study tried to predict the attitude towards substance use based on the assertiveness and psychological hardiness of addicts referring to addiction treatment centres in district 17 of Tehran in 2019. The sample studied was made up of addicts treated at the indicated centres and selected by an intentional, non-probabilistic sampling procedure. Barton's (1984) psychological hardiness questionnaire, Nazari's (2002) attitude towards self-reported addiction and Gambrill-Richey assertiveness inventory (1975) were used for data collection. The results indicated that there was a negative and significant relationship between the two variables of assertiveness and psychological hardiness with attitude towards substance use. Also, all three components of psychological hardiness (challenge, commitment and control) and assertiveness had a significant negative correlation with attitude towards substance use. Therefore, reinforcing each of the mentioned cases can change the attitude towards substance use in order to reduce it.

We will now develop the discussion in the following order: (a) characteristics or profile of the sample studied; (b) discussion of the variable " physiological hardiness" and attitude towards drug use; (c) discussion of the variable "assertiveness" and attitude towards drug use; (d) Main hypothesis on variables predicting attitude towards drug use.

Profile of the sample studied

The socio demographic characteristics analysed in the sample of subjects are: gender, age, education, social class, income level, employment status and marital status. The findings showed that among participants of the study, 69.2% of the subjects were male and 30.8% were female. It was as same as other studies regarding the gender of addicted people in Iran (Ghaderi, et al, 2017). Probably most of the study, showed that addicted male are more than female furthermore, 17.5% (n=35) of the subjects were under 20 years old, 48.3% (n=97) were between 21 to 30 years old, 23.7% (n=47) are between 31 to 40 years old and 10.5% (n=21) were over 40 years old. In other studies, such as Khazaee-Poo, et al. (2019) indicated the different statistics. They showed the majority of addicted people are between 23 to 35. Regarding the education levels of the participants, it should be mentioned that the majority of the sample had diploma and less certificates (67.2%; n=136), 27.2% (n=55) of them had Bachelor degree and 5.6% (n=9) had Master degree and higher. This finding also verified by most of the studies in Iran (Jalilian, et al, 2015)). Also, 19% of the subjects were in the upper class, 35% in the middle class and 46% in the lower class. Income level was also important in this study, the finding showed that the income

level of 13% of the subjects was below 20 million Rials per month, 38% between 20 to 40 million Rials per month, 30% between 40 to 60 million Rials per month and 19% above 60 million Rials per month. Other studies such as Ghiabi (2018) showed that the level of income effects the addiction. They indicated that people with low income fall into the trap of addiction, 32% of the subjects are employed and 68% unemployed. This is the fact that Doostian, et al. (2019) mentioned. They argues that employment is one of the challenges faced by people with drug-related disorders so that even standard treatments are less likely to be employed after treatment At least, about the marital status, the results showed that 48% of the subjects are married, 18% divorced and 34% single. Jolaee et al. (2014) also indicated that about 47% of Iranian drug users are married.

About using different types of substances, the results indicated that the amount of opium, glass, heroin, crack, hashish, ecstasy, opium sap and other substances used is 40.2%, 15.16%, 8%, 9%, 4.32%, 2.32%, 3% and 18%, respectively. In this regard, the results showed that most of men (36.96%) use Opium. Consuming of other substances (18.84%), Crack (12.32%), Glass (10.87%), Heroin (9.42%), Hashish (6.52%) and Ecstasy (2.90%) are in the lower ranks. And, the least substance used by them is Opium sap (2.17%). Also, most of women (46.77%) consume Opium. Using of Glass (24.19), other substances (16.13%), Heroin (4.84%), Opium sap (4.84%) and Crack (1.61%) are in the lower ranks. Finally, no woman consumes Hashish. Also, the findings indicated that the majority of all ages (37.14% in under 20 age group, 44.33% in people between 21 and 30 and 38.30% in 31 to 40 age group) consume Opium except the people over 40 that They mostly use Glass (33.33%). They are addicts in under 20 age group who do not use Ecstasy and Opium sap. Also, people who have age 21 to 30, do not consume Hashish. Furthermore, for types of substances consumed by educational levels, it was observed that using Opium is popular among addicts where 44.85% of people who have diploma and less degree, 29.09% of who have bachelor degree and 33.33% of addicts with master degree and higher consume it. As can be seen, Ecstasy and Opium sap among addicts with diploma and less (1.47%) and bachelor (3.64%) degree and Heroin, Crack and Hashish in people with master and higher degree (0%) are not popular. Types of substances consumed by social class showed that 34.21% of people in upper class, 34.29% of addicts in middle class and 46.74% of addicts in lower class consume Opium. In other word, it is the most consuming substance among the three social classes. After that, the majority of addicts in two upper and middle class tend to consume other substances except the ones which are listed

in the below table. But, most people who are not in good financial shape use Glass after who consume Opium. What is interesting in the below table is that Glass, Heroin and Crack (10.53%) and Hashish and Opium sap (5.26%) have the same popularity among some addicts in upper class. Also, it is true for Heroin, Crack and Hashish (7.14%) in middle class; but, in lower class, addicts have different tastes except in Hashish and Opium sap with lower percentage (2.17%).

The results of duration of substance use indicated that duration of drug use by 30% of the subjects is under 2 years, 40% between 2 to 5 years, 18% between 5 to 7 years and 12% over 7 years. Also, classified duration of using substances by the gender of addicts showed that the duration of using substances of the most of men (38.41%) and women (43.55%) who are addicted is between 2 and 5 years. After them, it is just under 2 years for 33.33% of men and 22.58% of women who are addicted. Almost with the same rate (18%) of men and women are addicts of 5 to 7 years. The most interesting part of the table is that as duration of using substances goes by (over 7 years), the number of addicts in both genders decreases (10.14% for male and 16.13% for female). In this regard, Powis, et al. (1996) also provided similar information, stating that the duration of drug use among men was between 4-8 years, but shorter among women.

The findings also indicated that about half the addicts of under 20 (45.71%), 21 to 30 (44.33%), 31 to 40 (29.79%) and over 40 (33.33%) years old are consuming substances the time between 2 to 5 years. MTF (Monitoring the Future) also assesses the degree or duration of highs experienced by 12th graders, both as trends at the population level and in terms of variation from drug to drug. Measuring these subjective experiences and monitoring changes in them over time, as MTF has done for many years, can be helpful from epidemiological and policy perspectives. Although these data do not address the many qualitative differences in the experience of being high, they provide a useful description of two important dimensions: degree and duration (Jat & Rind, 2019) After that, duration of substances using is high among age groups (34.29% for under 20, 29.9% for 21 to 30, 27.66% for 31 to 40 and 28.57% for over 40 years old). As it is mentioned in the last part, when the duration of using substances goes by (over 7 years), the number of addicts in all age groups decreases. About the duration of use in different educational levels. It was founded that the second raw (2 to 5 years) has the most frequency (41.91% for people with diploma and less degree, 36.36% for bachelors and 33.33% for addicted with master and higher degree) among the others. In total amount, it is seen that the majority of the addicts have diploma and less degree (136

people). It can be concluded that the higher the education, the less addicted. Regarding the social levels and duration substance use, the study observed that the lower the social class level, the more duration substances use (38 addicts of upper class, 70 ones for middle and 92 people for lower class). As it is mentioned before, the people with a little experience (more than 2 and less than 5 years) of using substances have the most rate among others. Perhaps it is because of the financial power that people in the upper social class still use substances (over 7 years with 28.95%). It is time under 5 years that about 73% of addicts in middle class consume substances. It is 74% for lower class addicts. In this regard, Daley, et al (2013) mentioned that SUDs (substance use disorders) are associated with many social and family levels. These levels create challenges for the member with the SUDs in treatment and/or recovery, the family, and society. There are many effective interventions and treatments, and mutual support programs, to help individuals with SUDs and families address these issues.

Attitudes toward drug use and physiological hardiness

It is important to consider each hypothesis in details to understand the causes of the results and also to interpret the findings. *The primary aim of this study was to examine the relationship between attitudes toward drug use and Psychological Hardiness*. The results showed that there is a negative and significant relationship between Psychological Hardiness and Attitude towards Drug Use. In other words, with increasing it, the amount of attitude towards Drug Use decreases and the severity of this relationship is visible in the above. It means that the better the attitude towards drugs, the lower the hardiness.

Many psychological authors believed that one of the most important strategies in preventing addiction is to change the attitudes and to maintain negative attitudes towards drug abuse (Peterson, et al, 2019). Attitude means the individual beliefs about the outcome of any deed and the value that the individual considers for this outcome. Attitudes are the rational reasons for behaviour of each particular person (Opp, 2019). There are many factors affecting the attitudes of individuals. In this research, assertiveness, psychological hardiness, attitudes are examined. Psychological hardiness is a personality style that includes the components of commitment, control and challenge and encourages the development of individuals' lives.

Hardiness is one of the personality trait proposed by Kobasa et al. (1979) that could explain resistance to addiction. They believe that hardiness acts as a source of resistance to encounter

stressful life events. This personality trait has three components: commitment, control, and challenge. An individual who has high commitment believes in the importance and value of his/her existence and action. Similarly, an individual with the proper control has faith in his/her ability. Thus, the level of control in a person indicates his/her ability to accept life changes as normal life features and path. Being able to take challenges (whether positive or negative) is considered as an opportunity for personal growth which contributes to hardiness. Moreover, individuals who are high in hardiness often possess certain characteristics such as high intelligence, lack of substance abuse and delinquency, independency, empathy, commitment to work, and have good relationships with peers (Soleimani, et al, 2019). In short, hardiness makes a defence mechanism to addiction since individuals who score high on hardiness are less susceptible to addiction. This issue can verify the study finding which showed the attitude toward drug abuse effects the hardiness. It seems good level of awareness will make the attitudes towards Iranian drug use. The problem is that despite negative attitudes of Iranian towards drug abuse, but day by day we are seeing an increase in the number of young people who turn to drugs, and this shows that there is no negative attitude, and most people think that they will not become addicted by using it several times. But the reality is that this kind of attitude has a negative effect on their hardiness and makes them unable to resist drugs.

Evidence of subsequent researches indicated that hardiness facilitates individuals' ability to cope with job pressure and acts as a protective shield against pressure (Lambert, lambert& Yamase, 2003). Individuals with low hardiness show severe emotional reactions to life problems, and in the long run, they experience the most damage through mental stress, while individuals with high hardiness remain healthy despite the overwhelming conflicts and events that are painful to others (Kobasa, 1979). Meddi (2007) also believes that hardiness can be defined as a factor of experience in maintaining health and increasing performance despite the stressful situation (cited by Mostaghni & Sarvqhad, 2012). According to the above evidence, hardiness is as a kind of barrier for attitude toward drug use. Our results also support this relationship that hardiness appear to prevent use substance.

Indeed, while drug abuse can be seen as an avoidance coping strategy, hardiness and its subscales guide students to adopt coping strategies that help them solve their problems. People with high hardiness tend to deal directly with life events rather than denying or attempting to avoid problems caused by the occurrence of life events. In contrast, people with lower hardiness feel a sense of

helplessness, alienation, and threat in the face of adversities in life. Also, they tend to have less control over the problems and events. Therefore, young people with higher hardiness have great tolerance or resistance against the inevitable life pressures that threaten their well-being including social environment (e.g. relationships with partners). They are able to manage their emotions perhaps by adopting more problem solving approaches rather than using emotion coping strategies such as turning to drugs that will lead to addiction (Chan, 2005) The study showed that in Iran substance use in young people (between 21 to 30 years old) are more than others. It indicates that the hardiness in these ages are properly decreases. This fact makes the responsibility of the family, university and the education part of the country heavier.

It seems that in Iran, easy access to different types of drugs and the environment are two of the major reasons that spread addiction among the youth and decrease their psychological hardiness. It is common to find students affected by addiction (Lebni, et al, 2019). The community and family members hardly suspect that addiction could occur among students, since in their mind, students are supposed to be in school and engaged in learning with little or no opportunity for distraction to drugs. But the fact is that they are exposed to addiction while there are no education protecting them from drug use. Psychological hardiness is one of the attitude which should be learned and it is as an urgent need in the process of leaning in Iran's' schools (Faramarzi & Khafri, 2019)

According to the results of the above hypothesis, Kulak, et al (2020), did the study and indicated that hardiness protects against problematic alcohol use in male, but not female, soldiers. This result is different with the present study findings, as in present study, indicated that the attitudes towards drug has negative effects on hardiness in all men and female, such as, Salehi Heydarabad et al. (2014) did the same research. They entitled Brain-Behavioural Systems, Psychological Hardiness and Tolerance of Ambiguity in Substance Abusers and Normal Individuals, it was found that some personality traits such as brain-behavioural systems, psychological hardiness and tolerance of ambiguity play an important role in drug abuse tendency. This findings support the findings of the present study. In present study, we found that the hardiness is a psychological personality which is influence by attitudes towards drug use. And they have negative relationship.

Attitudes toward drug use and assertiveness

The second aim of this study was to examine the relationship between Attitude towards Drug Use and Assertiveness. The results of the study showed that there is a negative and significant

relationship between Assertiveness and Attitude towards drug use. In other words, by increasing it, the favourable attitude toward drug use decreases, which intensity of this relationship is visible in the Table 4.49. In this regard, it should be discussed that according to Shiling (2003) idea, assertiveness means protecting one's own rights and beliefs without violating of others' rights. Assertiveness is a behaviour that helps individuals maintain their own self-esteem while respecting others' rights and increase the probability of obtaining better results. Assertiveness and bravery are synonyms. Wolpe (1993) also describes the assertiveness as Proper expression of any emotion to the other party without feeling anxious (Di Loreto, 2017). Therefore, the individuals who are passive or aggressive in interpersonal situations are considered appropriate for assertiveness training. Assertiveness training is considered as an alternative treatment for most stresses due to interpersonal interactions (Prochaska & Norcross, translated by Seyed Mohammadi, 2010).

Assertiveness skills is really important in social situations in recent years, especially in interpersonal interactions. In the same way, the growth of non-assertive behaviours is at paly for those who are affected by high-risk situations (such as groups of friends that offer drugs or risky sexual behaviour). People who are unable to express themselves due to lack of interpersonal skills do not consequently have the courage to reject unreasonable requests and lack the ability to defend their rights (Fiedler & Beach, 1978). In the definition of self-expression, it has been referred to "the ability to explicitly express one's feelings, beliefs, and thoughts and defend one's constructive and legitimate skills". Assertiveness is defined as the ability to defend oneself and the ability to "say no" to the requests that one does not want to do. So, considering this factor, those who have lower levels of assertiveness are expected to passively agree with unreasonable requests made by others such as offer to drug use and, thereby, they succumb to such requests despite reluctance. Assertive behaviour in interpersonal and intrapersonal relationships is effective in critical situations. Several studies (Salavera, et al, 2019) have shown that lack of social skills and the prevalence of behavioural disorders in the future are interrelated. These problems that are associated with individuals' poor performance in social skills, include: delinquency, deficiency in school performance and cognitive performance, escape from school, alcoholism, antisocial behaviour, and mental disorders.

One of the studies which mentioned the same results was for Aghabakhshi et al (2009). They studied factors affecting the tendency of young people to drug abuse and showed that weakness in the power of assertiveness and individual decision making affects Tehran's youth tendency to

synthetic drug abuse. This is the same as out findings in which mentioned that the attitude towards drug abuse is related to assertiveness. If people have negative attitude towards drug use, it makes them more powerful to say no to any drug and effects their negative tendency to drug abuse. HajiHasani et al. (2012) also did the study in this regard. They entitled Relationship between Aggression, Assertiveness and Depression with Drug Addiction Potential in Female Students of Allameh Tabataba'i University showed that there is a significant relationship between aggressions, assertiveness and depression variables with addiction potential. They also did the study in line with the present study. They also showed that assertiveness has negative relationship with drug use. However, in present study attitude is considered, but the two can be put in the same direction.

Main hypothesis on variables predicting attitude towards drug use

In order to investigate the relationship between the predictor and the Attitude towards Drug Use as a main hypothesis in present study, the results indicated that Assertiveness and Psychological Hardiness are significant predictors and explain 65% of the Attitude towards Drug Use in this study. These results are consistent with the result of Akbari Shayeh et al. (2013). They showed that there is a positive and significant relationship between personality traits of neuroticism and agreement as well as alexithymia and emotion- and problem-focused coping styles with stress and addiction potential. Aderm and Nickmanesh (2012) also investigated the tendency to drug abuse in young people based on personality traits and showed that there is a direct relationship between addiction potential and personality traits. Two main personality traits mentioned in this study are, resilience and assertiveness. We can relate the resilience to hardiness, because as people feel a high resilience to environmental variables, their hardiness increases. On the other hand, assertiveness is another personality trait that can be used to warn people of many failures.

According to the results of the study, people who have low hardiness will hurt more by harmful elements while those with high hardiness apparently have natural or acquirable security against the stressful elements. Hardiness is the ability to understand the external conditions accurately and to make a desirable decision about oneself. Persons low in hardiness may be more likely to use avoidance or regressive coping approaches in response to stress, including substance abuse. In this regard, it seems possible that people especially young ones who are low in hardiness are at elevated risk for substance abuse problems. Also, those who are successful in harmony with others and the social structure and enjoy higher levels of self-confidence will not be exposed at risk for drug

dependence. In future studies, it is possible to argue that those who have lower levels of assertiveness enjoy lower degrees of self-esteem and self-concept and, thereby, do not have the ability to say no to the unreasonable requests of others. In consequence, such people try to assimilate into addicted friend in order to compensate for their poor self-concept so that they might be approved by such friends and be saved from further rejection (Sunandha & Vijayalakshmi, 2019).

The results of the study also indicated that drug abuse among unemployed people is more that employed ones. This finding, verified the Garcia (1996) research, he in a study titled *Determinants of Substance Abuse at Workplace*, showed that several groups of employees had less tendency to substance abuse: more paid employees, employees with university education. In this situation, the role of NGOs, families, education part of the country are more highlighted. With more statistical data about younger addicted people in our country, it seems, the relevant organizations have not been able to fulfil their responsibilities properly. So, what happened? Society is facing a lot of addicts and people who are becoming addicted.

Limitations of the investigation

The statistical population of this study consisted of addicts referring to the addiction treatment centres, so not all drug users are treating their addiction. In other words, at some point, their attitude towards consumption was favourable. Perhaps the effect of algebraic and power on a sample of young people from the general population can also be assessed. On the other hand, the sample of this study is limited to District 17 of Tehran and cannot be extended to other areas.

The tools used in this study are limited to the standard questionnaires that are self-reported, which may result in response bias, and other tools such as interviews have not been used.

This study examined only two psychological variables that affect attitudes, but other variables can also be evaluated, such as "personality" and more information about the main reasons that lead to consumption, such as the sample collected.

Sampling indicates cross-sectional measurement at a single time and in a single sample, which, although large, cannot be generalized to the entire addicted population of Iran.

Finally, the major drawback of correlational studies is that they cannot be used to make unequivocal causal inferences, although the absence of a correlation generally does rule out a causal relationship.

Research strengths and recommendations

The main strengths of the research presented relate to the large clinical sample that participated in the study, the uniqueness of the research in Iran and the research results themselves.

The results of the research clearly show that there is a negative and significant relationship between Psychological Hardiness and Assertiveness with Attitude towards Drug Use; in other words, with increasing it, favourable attitude towards Drug Use decreases. The severity of this relationship is visible in the above.

On the other hand, this study was conducted with a clinical number of people on drug addiction in different centres of Tehran, which is related to the similar research in this population and in the same field (few authors cite). They have done the same thing in Iran.

The results of the main hypothesis confirmation have implications and recommendations, at the level of clinical treatment, but mainly at the level of prevention, both in the field of public health, education and family, as well as the consequences at the level of health policies that strengthen. Clinical drug prevention programs.

From a clinical point of view, it is recommended that treatments reinforce exercises and psychological strengths, as measures to reinforce negative attitudes toward drug use, which facilitates treatment success. In fact, drug prevention training is very important that should be done during the course of treatment, as Allan Marlatt (1993) has already shown, and among other aspects, it can be reinforced with confidence and work on psychological strength.

The main implications and recommendations focus on the area of primary prevention in different contexts:

Especially in the primary and high school. In this sense, as other authors have previously recommended (Salavera, et al., 2019). Hardiness training positively increased individuals' hardiness attitudes, so it suggest that school present training programs to improve hardiness and assertiveness to promote an attitude unfavourable to drug use. The Prevention in adolescents and

young adults also requires family involvement. The parents should focus on their children's positive traits and sincerely praise his or her efforts and encourage him or her at different times (Walters, 2020). Contributing to the development of their hardiness and assertiveness among other personality traits.

Political action should be taken to promote prevention programs and strengthen public health to reduce the incidence of addiction at the youngest age. The government should provide the necessary funding to create incentive programs in the community, such as using artistic and sports capacities and promoting libraries, etc. But it should especially encourage the development of programmes for the prevention of drug use among adolescents at school and community level, as indicated in the recommendations of various international bodies (García-Poole, et al, 2019.) Conducting assertiveness and hardiness skills training courses or programs to combat adolescent tendencies to substance use can serve as a solution for policymakers and planners in Health and social considerations.

Finally, based on the sample specifications, the following can be recommended:

- The government should provide the necessary funding to create incentive programs in the community, such as using artistic and sports capacities and promoting libraries, etc.
- As the results showed that 69.2% of the substance users are male and 30.8% female. It suggests that Families should have more control over boys and not discriminate on the basis of gender in training their children.
- As the results showed that 48.3% of people used the drug (n=97) are between 21 to 30 years old, it suggests that relevant organizations(Ministry of Sport and Youth, educational organizations) take effective work to create jobs opportunities for young people in society and increase the spirit of self-confidence among the youth.
- As the results showed that the majority of the addicted people has diploma and less certificates (67.2%; n=136), it suggests that Special attention paid to skills training in schools and special facilities will provide for people to continue their education.
- As the results showed that 46% in the lower social class used drugs more than other classes, so, it suggests that there should be social welfare for the people at all levels, and the government should be responsible for justice in the distribution of wealth. As the results showed that 32% of the addicted people were employed and 68% were unemployed, therefore,

it suggests that entrepreneurial skills will be taught during school and special facilities will be provided for entrepreneurs.

Chapter 6

Conclusions

The present study tried to investigate prediction of attitudes towards substance use based on the assertiveness and psychological hardiness in Tehran. In this regard, In order to investigate the relationship between the predictor and the attitude towards drug use as a main hypothesis in present study, the results indicated that Assertiveness and Psychological Hardiness are significant predictors of attitude towards drug use. According to the main hypothesis, two sub-hypotheses were examined. The results of the first hypothesis test showed that there is a negative and significant relationship between Psychological Hardiness and Attitude towards Drug Use; in other words, with increasing it, the amount of attitude towards Drug Use decreases; the severity of this relationship is visible in the above .It means that the better the attitude towards drugs, the lower the hardiness. The results of the second hypothesis, also showed that there is a negative and significant relationship between Assertiveness and Attitude towards Drug Use; in other words, by increasing it, the favourable attitude toward drug use decreases, which intensity of this relationship is visible in the table above

Addiction has many negative consequences including the disintegration of families, loss of financial resources, and other social deviations such as theft, murder, etc. The undesirable effects of this damaging social problem not only involve the addict, but also all those who are associated with the addicted person. Besides the physical adverse consequences of addiction including malnutrition, hypertension, and cancer, addicted individuals will be exposed to dangerous diseases such as AIDS and hepatitis. Research has shown that addicts suffer from lower psychological well-being because they often experience anxiety, irritability, depression, psychosis, loss of control, and lack of confidence. The addicted person also negatively affects the people around them, especially their immediate family members.

Since in recent decades in Iran, even in relation to typology and recognition of the personality traits of Iranian addicts, scientific research published in specialized journals or presented at specialist congresses have been very rare, and also due to the need to understand the risk factors and predispositions the tendency to drug abuse, which could provide a basis for the formulation of preventive programs, also due to the fact that the relationship between personality and the tendency to high-risk behaviours such as drug abuse is obscure, the present research was conducted to determine the personality traits of susceptible individuals and also some related factors of prevention of addiction, in order to help future researchers, Investigating traits such as assertiveness and hardiness that are modifiable in the individuals' personality, as well as family

and community characteristics can guide future researchers and planners in the field of drug addiction prevention.

Addiction brings about many problems in the individual, the families and society, so, it is necessary to identify the factors that contribute to the prevalence of this disorder. In the present study, two factors as psychological hardiness and assertiveness are examined among addicted people. The results showed that there is a negative and significant relationship between psychological hardiness and assertiveness with Attitude towards Drug Use hardiness has a positive relationship with physical and mental disorder. People high in hardiness and the sense of control are more likely to form positive outcome expectancies in response to stress (positive coping), whereas low-hardiness people tend toward negative outcome expectancies (hopelessness or helplessness).

According to the findings in Chapter Four it can be said that psychological hardiness and assertiveness in total explains 65% of the attitude towards drug use. According to this number it can be said that these two variables can very well predict a positive attitude towards drugs so it is necessary that officials in this area in the country and related psychologists to invest in education and counselling for addicts as well as those who have a high tendency and attitude to use drugs.

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Appendix

In the Name of God

Dear respondent

Hi,

This study seeks to address the question "Predicting attitude towards substance use based on assertiveness and psychological hardiness". We hope that with your cooperation and assistance, this will be achieved. Therefore, you are asked to answer this questionnaire honestly and leave no item unanswered. It should be noted that this questionnaire does not need to write your names and you are completely free to express your views and opinions. Thank you in advance for your sincere cooperation.

Thanks: Kazemi

1) Demographic questions

Gender: Male Female

Level of education: Under diploma Diploma University education

Income: Bad Moderate Good

2) Questionnaire

Attitude Towards Addiction Inventory					
Items	Totally agree	Somewhat agree	No idea	Somewhat disagree	Totally disagree
1. Dealing with addiction makes human flaws and weaknesses more apparent. 2. Drug use is somewhat justified under the stressful and difficult conditions. 3. Addiction represents the inability of human to fulfill his/her desires. 4. Sometimes, drug use for entertainment has no problem. 5. Addiction brings dignity. 6. Addiction hurts one's sense of responsibility in life. 7. Drug use is worth experiencing. 8. It is better to say that an addict has no will. 9. Drugs increase our attention. 10. If my friend finds out that I use drugs, he'll cut off his relationship with me. 11. It is better not to limit drug carrying. 12. Addiction indicates that the addict has a high social level.					

13. Drug addicts are willing to do anything to obtain drugs. 14. Opium is a painkiller and not addictive. 15. I like attending a party in which participants use drugs. 16. Drug carrying and distribution is illegal. 17. Those who have attained intellectual independence turn to addiction. 18. Drugs relieve fatigue. 19. I do not understand why the government fights addictive drug manufacturers. 20. Drugs can enhance our understanding of issues. 21. Drug use strengthens body muscles. 22. Addiction is a good way to forget problems. 23. Addiction indicates an addict's weakness. 24. The addict is also a human being and the government must support him/her. 25. At parties it is better to recommend drug use to others for entertainment. 26. Drug use is soothing. 27. In the issue of addiction, only the addict himself/herself is involved and others are not hurt. 28. I try to stay away from the addict. 29. Whenever you are in distress, it is better to use drugs. 30. Addicts have no place in society. 31. In my opinion. the addict has no decision making power. 32. The risk of a single drug use is like the risk of using it throughout life. 33. I think that the addict has no specific purpose for life. 34. Anyone who turns to drugs will no longer be able to continue his/her education. 35. I think that drug use for entertainment has no problem.					

Assertiveness Inventory

After reading each sentence, tick the option that most closely matches your feelings in that situation.

1) I get very upset, 2) I get upset, 3) I get upset on average, 4) I get upset a bit, 5) I don't get upset at all

Row	Expressions	5	4	3	2	1
1	Rejecting friends' requests when they want to borrow a book from you					
2	Praising friends					
3	Having a request or demand from friend or someone else					
4	Interrupting one of talkative friends					
5	Rejecting the request of someone who wants to invite you somewhere					
6	Protesting someone who has bothered you					
7	Asking someone private questions					
8	Apologizing when making a mistake					
9	Starting a conversation with a stranger					
10	Asking a friend to come to your home					
11	Comfortable dealing with someone who has criticized your behaviour					
12	When you do not understand a topic in a discussion you want the other party to tell it to you again					
13	Making another request from someone who once rejected your request					
14	Returning defect purchased items to sellers					
15	Expressing an opinion that contradicts your opinion					
16	Telling someone that what he/she has done or said is not right for you					
17	Telling the good news about yourself to another person					
18	Resisting the respectable person who has asked you to do something but you cannot do it					
19	Requesting the return of what has been borrowed from you					
20	Accepting the compliment on you					
21	Protesting someone who has disturbed you in public.					
22	Protesting someone criticizing your work					

Hardiness Inventory

Items	Not true at all	Somewhat true	Almost true	Completely true
1. Most of the days I wake up excitedly to continue my life from where it was ended on the day before. 2. I love the diversity in my work. 3. Most of the time the chiefs or superiors listen to me. 4. Timely planning will prevent further problems in the future. 5. I often feel that by doing today's actions I can change the process of what may happen tomorrow. 6. I feel uncomfortable having to make a change in my daily routine. 7. Despite my efforts, they remain fruitless. 8. It is difficult for me to imagine the excitement of "working". 9. Regardless of what you do, the tried methods already proven to be valid are always the best. 10. I feel it is often impossible to change my husband/wife's opinion about something. 11. Most of those who work for a living are merely under the influence of their bosses. 12. If the enactment of new laws results in the violation of individuals' rights, such laws should not be enacted. 13. You will lose your freedom by getting married and having children. 14. No matter how hard you work; it seems that you will never achieve your goals. 15. For a reliable judgment, one might look to someone who rarely changes his/her minds. 16. I believe that in life whatever is going to happen happens, and it has been fated. 17. No matter how hard you try in your work. Because that's just the heads who benefit your efforts. 18. I don't like talking to people who are ambiguous about what they mean. 19. Often trying too much is useless, because nothing ever is going well. 20. The most exciting thing for me is my fantasies. 21. I will answer no one's question, unless his/her purpose is clear to me.				

22. When planning, I am sure that I will be able to do it. 23. I'm really eager for my work. 24. When I'm doing something, if at the same time they ask me to do something else, I'm not upset about this. 25. When I am doing something or face a difficult task, I know when to ask others' help. 26. It is exciting for me to know something about myself. 27. I like to be with people who have unpredictable behaviours. 28. It is often difficult for me to change my friend's opinion about something. 29. The notion that I am a completely free person simply frustrates and upsets me. 30. It saddens me that something unpredictable is disrupting my daily life. 31. When I make a mistake, I know that there is nothing I can do to make up for it. 32. I feel it is not necessary to put in a lot of effort to do the job, because finally it makes no difference. 33. I respect the rules because they are my guidelines. 34. One of the best ways to deal with a problem is to not simply think about it. 35. I believe that most athletes are born for this job. 36. I don't like things to be unclear and unpredictable. 37. Those who make their efforts must be financially supported by the community. 38. I've spent most of my life doing meaningless things. 39. Most of the time I really don't know what I think or believe. 40. In my view, theories that are not exactly truth-based are useless. 41. In my opinion, ordinary things are so dull that they are not worth doing. 42. When others get angry at me they often have no good reason to get angry. 43. I get upset whenever there is a change in the way I do things. 44. I can hardly believe those who say their work is valuable to society.				

45. I believe that if someone tries to harm me, I often can't do much to prevent it. 46. Most days, life is not fun for me. 47. I believe that those who talk about personal dignity are simply trying to influence others. 48. When I am reprimanded for my work, I often find no justification for it. 49. I want to be sure that someone will take care of me when I get old. 50. Politicians run our lives.				