Comparison of Mental Health of Smoking and Non-smoking Students university of Sistan and Baluchestan

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INTRODUCTION

The phenomenon of inclination toward smoking, as one of the most important social damages specifically among the young generation, has drawn the attention of many political-cultural, training and educational experts and authorities in many countries.

In Iran, due to the young population structure, this has become specially complicated. Thus, its accurate identification and explanation for finding appropriate solutions, seems necessary; but as this group has several and determining roles in the society, their damage even in small degrees, will bring forth irreparable personal, social, economic, cultural harms, etc; thus, adopting preventive programs about them if of high priority [1].

Studying the consumption of cigarettes at the present time is of special importance. On the one hand, the population of the Iranian society is young and on the other hand, young people are the main victims of cigarette consumption as young people have more vulnerability due to the characteristics of youth since they are dynamic and searching. Today, experts and professionals believe that the crisis of cigarette consumption has changed cigarette as the problem of the day besides three other crises i.e. the crisis of environment destruction, crisis of atomic threat and crisis of poverty. Naturally, solving this crisis and problem and destructive scourge is not only means of questionnaire, the data were analyzed for the rejection or confirmation of the statistical hypotheses by means of independent T-test and the one-sided variance analysis. The findings indicated that there is a difference between mental health of smoking and non-smoking students. In all subscales of mental health questionnaire, smokers were in a worse situation compared with the group of non-smokers. Also, the results showed that the mental health is the same among students based on age.

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traps children, teenagers, the youth and even the elderly in its course and besides disintegrating the cozy and virtuous family institution, it also leads to failure in life and inclination toward suicide and death in them [2].

The problem of cigarette consumption, as a fatal phenomenon the results of which can have very adverse effects in political, economic and cultural aspects of the society, is considered in every society and usually the group which is vulnerable to this dangerous phenomenon more than other groups, is surely the (young group) of a society. In general, the group of youngsters refers to the group of people between fifteen and twenty which constitutes an immense group of the world population, that is to say, about 8/5% of the population of the developed countries and 10/9% of the population of developing countries [3]. Evidently, the reasons for cigarette consumption are very complicated and differ from one culture to another culture and from one country to another country. Various studies have been conducted in the country and for instance in the level of universities which have somehow investigated the reasons for inclination toward cigarette consumption and so forth and have also reached some results in this area; but as was mentioned, inclination for and consumption of cigarette differs not only with that of the foreign countries but also inside our country depending on culture, religion, ethnicity, geographic area, climatic conditions, and economic, cultural and scientific level. Due to this and according to the significance of the issue, that is cigarette consumption among students of the university, as no study was conducted in this regard in the level of university, we decided to investigate the cigarette consumption and mental health comparison among smoking and non-smoking students with this study.

Regarding the problem of cigarette addiction and cigarette many studies have been carried out so far, whether in the causality area or prediction area, some of which will be pointed out subsequently.

In the study which was conducted by Aqhaazadeh for the comparative study between the memory quota (MQ) means of smokers and non-smokers on 100 students 50 of which were smokers and 50 were non-smokers, by means of the Wechsler memory scale, the memory quota rate of both groups was evaluated and after statistical analysis, the null hypothesis was rejected and the research hypothesis was confirmed, which means that the average short-term memory quota in non-smokers is more than that of smokers. This issue indicates that the memory of smokers is impaired over time [4].

The study by Shayesteh has been conducted regarding the comparison of the personality of addicts to cigarette and ordinary youths. In this study, the number of each group was 83 individuals and regarding age and education both groups were unique, and were selected randomly. It was concluded that the degree of neurosis and depression in young addicts was more than that of healthy people and also, the characteristics of hypochondria and hysteria with the 99% confidence were confirmed in the group of addicts. Furthermore, mental fatigue of addicts was also more and the research tools in this study were NMPI test and researcher-made questionnaire.

Another study so as to investigate and compare the spectrum of addiction to cigarette in 6008 female and male addicts was conducted by Zaghi et al. (1994). They concluded that the most common age group of addicts in men was in the age range 31-35 and in women 26-30 and the least age of start of addiction in the female sex was 10 years and in the male was 12 years. The most age of the female was 95 years and the male 75 years; in sum, addiction to heroin in women was calculated to be three times more than that of men.

Another study was conducted by Azad (1996) in the field of diagnosis of poisoning by opium and heroin which led to a more secure knowledge in identification of addicts. In this method there are less errors and it is also simpler in which the Morphine and its derivatives are identified with T.L.C. and it takes about 2 hours.

Another study was conducted by Tahsili et al. (1993) in the field of the personality of addicts to cigarette in Iran. This study was conducted in Shurabad rehabilitation center in Tehran and they were tested by means of the 16-factor Cattell test. It was resulted that a special personality pattern in Nistou addicts do not evidently suffer from mental imbalance and in the addicts under study nervous exhaustion, unrest and shortage, tolerance to failure, interest in art and aesthetic desires are considerable. Addicts had a critical imagination and in the factor I, they had a considerable deviation from Iranian and foreign norms which shows the roughness and immaturity of the personality.

Statistical investigations show that the economic damages resulting from misuse of cigarette in Iran is at least 1500 billion tomans per year. Absenteeism at work, unemployment instability and family problems are the cases that could be known as relevant to social effects of addiction. In the study carried out by the organization of the country prisons under the title of "the relationship of cigarette with other crimes" the results obtained showed a significant relationship between addiction and non-premeditated murders, financial crimes and cigarette smuggling. The persons misusing drugs have no proper and effective skills for struggling against negative emotions, current problems and struggling against risky situations regarding the consumption of drugs [4].

A study in the U.S. in the year 19998 on the relation of smoking with the mental image of smokers was conducted which showed that the cigarette consumption in men and women causes the reduction of mental perception.

A study was carried out by Melanie Maccain in the year 1996 concerning the approach of psychotherapy to addiction. Regarding the effects of psychotherapy and treatment of addiction, positive results were obtained. In
this psychotherapy, people are helped by themselves and this is applicable as a 12-stage plan. The findings of this study show that addicts are more susceptible to the selfish personality, schizoid and sexual addictions and have a higher educational background while the causes of addiction are still searched in their life and there are mostly hidden problems in the process of treatment.

Another study was conducted by Eric Sklimdet in 1993 to investigate the addicts concerning the treatment method of reasonable return. This method is based on the Alis illogical-emotional treatment. In this method, the patient is also helped to quit addiction actively on his own. He concludes that this treatment method takes a longer time but instead it will be more stable due to the active role of the person himself. The results of his studies were conducted based on the comparison of a group who were treated based on this.

Nowlis raised the question of why pupils and university students are drawn to cigarette and realized that one of the reasons of this issue is desire for finding meaning in life. The study conducted concerning 405 students in the San Diego area by Judd et al. for the national commission for abuse of marijuana and cigarette showed that the users of marijuana and cigarette suffer from loss of meaning in life more than others. In other studies which were undertaken by Mirin et al., it was observed that the high consumption of cigarette has a direct relationship with access to a significant experience and loss of target activities.

Betty Lou Pedelford has written a paper on the effects of tribal, physical backgrounds and image of the father in relationship with the use of cigarette and goal in life. The information he has collected from the studies of 416 students don't determine a significant difference between the commonness of using cigarette among students that have a weak image of the father and those that have a strong image of the father; but unquestionably there could be observed an important and significant relationship between cigarette and goal in life. The index of cigarette usage of students that didn't have high goals in life (8/90) considerably differed from the index of those that had high goals.

Monique Plyth who has conducted immense studies concerning the personality of the addict, states that the addicted behavior usually has a direct relationship with the state of depression and sadness of the person. As the personality of the addict evidently has insignificant analysis ability, the effect of this depression and illness on him increases. Most of the times, the addict takes refuge in a drug which he thinks more effective so as to enhance and intensify the power of imagination and the new modes of feeling; but the result he obtains is contrary to what he has hoped, that is to say he ends up with a kind of gradual passive state of unreal conformity resulting from indifference with the society and in the end with a severe depression. Addicts have personality traits and considering these traits, they are divided into two groups: psychotic and neurotic addicts. The first group constitutes most addicts and among them some mentally unbalanced traits like instability of disposition, change, arousal and masochism could be observed and in the latter group addiction has an obligation aspect and the emergence of anxiety doesn't immediately cause arousal and the escape of the person toward drugs; rather, the person partly tolerates this anxiety and willingly struggles with his addiction behavior (Sajadieh, 1986).

Gilbert and Lebardi in the year 1967 conducted a study on the personality of addicts which concerned the comparison of 45 addicts and non-addicts. They noticed that the major characteristics of addicts include psychopathic features, depression, stress, insecurity, feeling of incompetence and problem in establishing and forming long and successful relationships [1].

By means of the studies conducted by (Vander), emotional immaturity, lowness of tolerance threshold in difficulty, severe damage on the power of logic, judgement, evaluation of realities and as a result lack of ability in selection of logical and practical methods so as to resolve problems are among the factors which are effective in forming the foundation of suffering addiction. Due to the harmful personal and social effects of drug abuse, researchers have considered it as a kind of disorder [10].

Various studies have shown that addicts use the consumption of drugs as a method of struggling against daily challenges of life and pressures resulting from that [11].

Schafer & Brown (1991) with the study they conducted on consumers of drugs, concluded that people's expectations of the consequences of drugs have a significant role in continuation of their abuse. Expectations such as leaving painful thoughts and behaviors, relaxation, reduction of stress, ease of social-sexual relations, promotion of perceptive-cognitive quality, continuation of time of pleasure and happiness have been observed among people. According to the available studies of shortage of adaptive coping skills and positive expectations about the drugs independently and commonly encourage drug consumption as a method for struggling [11].

Experimental studies present increasing evidences concerning the fact that people, aware or unaware, resort to consumption of drugs so as to struggle with negative internal states [13].

Drug consumption is a general coping mechanism which is deployed in situations when there is no appropriate coping method or it is not used [15].

Base on the available studies, it could be concluded that addicts report higher negative emotions, boredom, fatigue, loneliness, shame, anxiety, concern, discussion, mental pressure, career pressure, family problems and low self-esteem compared with ordinary people.
Research Method:

The research method is descriptive-survey. According to the research subject, after determination of the number of samples, the GHQ questionnaire was prepared and randomly distributed among students. During the distribution of questionnaires, we also encountered persons who were not willing to continue cooperation or left in the middle; but this effort of incompletion of sample group has continued and then the aforementioned questionnaires have been amended and the results of the research work have been analyzed which will be discussed as follows.

The statistical population of the present research covers all students of dormitories of Zahedan university in the year 2011 and by means of the accessible sampling method, a sample with a size if 60 individuals was selected among the two accepted groups and the study was conducted on them. Each group includes 30 individuals among which one group is that of smoking students and the other group is that of non-smoking students.

GHQ Questionnaire

This questionnaire has made use of a 28-question form. GHQ questionnaire was invented by Golberg (1972) and the goal of designing it has been the discovery and identification or recognition of mental disorder in different centers and environments.

The questions of the questionnaire which investigate the mental status of the person in the recent month could be observed by signs such as deviant thoughts and feelings and aspects of behaviors. The questionnaire starts with physical questions and further we go, the questions become more psychological.

In this questionnaire, most questions are written as (no, a little, much, and very much).

Data obtainable from this questionnaire includes:
- Data concerning the scale of physical signs
- Data concerning the scale of anxiety
- Data concerning the scale of disruption in social functioning
- Data concerning the scale of depression

Questions 1 to 7 refer to the scale of physical signs, questions 8 to 14 refer to the scale of anxiety, questions 15 to 21 to the scale of disruption in social functioning and questions 22 to 28 to the scale of depression.

The Reliability of GHQ-28 Questionnaire

Houman (1997), Palahang (1995), Mojahed (1995), Yazdanpanah (1996), Mirkeshti (1996), Vosulati (2001) have reported the reputability of the questionnaire of the Persian version of GHQ-28 respectively as 84%, 91%, 88%, 62%, 92% and 89%.

Stability of Questionnaire GH-28:

Various studies indicate a high stability of the GHQ-28 questionnaire. Chung & Spizer (1994) in a study on 223 adult persons concluded that the stability coefficient of re-evaluating the questionnaire has equaled 55% and the stability coefficient for re-evaluating method of each of the four mentioned scales have been between 42% to 47%.

Method of Scoring the Questionnaire:

Usually, scoring is as (0, 1, 2, 3), that is, option 1 takes a score of zero, option 2 a score of 1, option 3 a score of 2, and option 4 a score of 3.

The maximum evaluating score with this scoring method will equal 84. The best grade with this method of scoring equals 23 that is, all persons the score of whose questionnaire equals or exceeds 23, will be considered as patients.

In this study, after the collection of data by means of the questionnaire, for the rejection or confirmation of the statistical hypotheses by means of the independent T test and one-sided variance analysis, the data are analyzed.

Research Hypotheses Test

First hypothesis: is there a difference between mental health of smoking and non-smoking students?

The difference between mental health of smoking and non-smoking students

<table>
<thead>
<tr>
<th>Kind of students</th>
<th>number</th>
<th>mean</th>
<th>Standard deviation</th>
<th>t</th>
<th>Degree of freedom</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>smoking</td>
<td>30</td>
<td>52.23</td>
<td>9.32</td>
<td>6.25</td>
<td>58</td>
<td>.000</td>
</tr>
<tr>
<td>Non-smoking</td>
<td>30</td>
<td>40.66</td>
<td>3.96</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The findings of the table indicate that the mean and standard deviation of mental health of smoking students are 52/23 and 9/32 respectively while these measures for the mental health of non-smoking students have the mean (40/66) and standard deviation (3/96). The calculated t equals 6/25 which is statistically significant with the 58 degree of freedom and 99% level. These results indicate that there is a significant difference between the
mental health of smoking and non-smoking students. Regarding the comparison of the subscales of mental health the following results were obtained:

The difference between the subscales of mental health of smoking and non-smoking students

<table>
<thead>
<tr>
<th>Kind of students</th>
<th>mean</th>
<th>Standard deviation</th>
<th>t</th>
<th>Degree of freedom</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical signs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>smoking</td>
<td>12.96</td>
<td>2.72</td>
<td>5.23</td>
<td>58</td>
<td>.000</td>
</tr>
<tr>
<td>Non-smoking</td>
<td>9.66</td>
<td>1.76</td>
<td>3.41</td>
<td>58</td>
<td>.001</td>
</tr>
<tr>
<td>anxiety</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>smoking</td>
<td>12.03</td>
<td>2.77</td>
<td>5.21</td>
<td>58</td>
<td>.000</td>
</tr>
<tr>
<td>Non-smoking</td>
<td>9.96</td>
<td>1.88</td>
<td>5.21</td>
<td>58</td>
<td>.000</td>
</tr>
<tr>
<td>Social functioning</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>smoking</td>
<td>14.06</td>
<td>2.54</td>
<td>4.39</td>
<td>58</td>
<td>.000</td>
</tr>
<tr>
<td>Non-smoking</td>
<td>11.23</td>
<td>1.54</td>
<td>4.39</td>
<td>58</td>
<td>.000</td>
</tr>
<tr>
<td>depression</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>smoking</td>
<td>13.16</td>
<td>3.72</td>
<td>5.23</td>
<td>58</td>
<td>.000</td>
</tr>
<tr>
<td>Non-smoking</td>
<td>9.80</td>
<td>1.93</td>
<td>5.23</td>
<td>58</td>
<td>.000</td>
</tr>
</tbody>
</table>

The findings of the table indicate that the mean and standard deviation of physical signs of smoking students are 12/96 and 2/96 respectively while these measures for the physical signs of non-smoking students have the mean (9/66) and standard deviation (1/76). The calculated t equals 5/23 which is statistically significant with the 58 degree of freedom and 99% level. These results indicate that there is a significant difference between physical signs of smoking and non-smoking students.

The table findings indicate that the mean and standard deviation of the anxiety of smoking students are respectively 12/03 and 2/72 while the measures for the anxiety of non-smoking students have the mean (9/96) and standard deviation (1/88). The calculated t equals 3/41 which is statistically significant with the 58 degree of freedom and at the 99% level. These results indicate that there is a significant difference between the anxiety of non-smoking and smoking university students.

The table findings indicate that the mean and standard deviation of the social functioning of smoking students are respectively 14/06 and 2/54 while the measures for the social functioning of non-smoking students have the mean (11/23) and standard deviation (2/54). The calculated t equals 5/21 which is statistically significant with the 58 degree of freedom and at the 99% level. These results indicate that there is a significant difference between the social functioning of non-smoking and smoking university students.

The table findings indicate that the mean and standard deviation of the depression of smoking students are respectively 13/16 and 3/72 while these measures for the depression of non-smoking students have the mean (9/80) and standard deviation (1/76). The calculated t equals 5/23 which is statistically significant with the 58 degree of freedom and 99% level. These results indicate that there is a significant difference between the depression of non-smoking and smoking university students.

Second hypothesis: there is a significant difference between the mental health of students based on age.

Results of descriptive statistics of mental health based on age

<table>
<thead>
<tr>
<th>variables</th>
<th>age</th>
<th>mean</th>
<th>Standard deviation</th>
<th>number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental health</td>
<td>18-20 years</td>
<td>43.36</td>
<td>7.31</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>21-22 years</td>
<td>49.95</td>
<td>10.47</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>23-24 years</td>
<td>47.00</td>
<td>9.92</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>25 years and above</td>
<td>45.00</td>
<td>6.69</td>
<td>6</td>
</tr>
</tbody>
</table>

The results of the one-sided variance analysis of mental health based on age

<table>
<thead>
<tr>
<th>variable</th>
<th>groups</th>
<th>Sum of squares</th>
<th>Mean squares</th>
<th>df</th>
<th>f</th>
<th>sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental health</td>
<td>intergroup</td>
<td>470.80</td>
<td>156.93</td>
<td>3</td>
<td>1.94</td>
<td>.133</td>
</tr>
<tr>
<td></td>
<td>intragroup</td>
<td>4516.04</td>
<td>80.64</td>
<td>56</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>sum</td>
<td>4986.85</td>
<td>107.24</td>
<td>59</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The table above in relation with the results of the one-sided variance analysis test of mental health based on age, indicates that the calculated F equal to 1/94 with the freedom degree of 3 and 56 at the 95% level is not significant, that is to say the mental health among students based on age is not the same (p > 0/05).

Discussion and Conclusion:

The findings indicated that there is a difference between mental health of smoking university students and non-smoking ones. Smokers were in a worse situation compared with the group of non-smokers in all subscales of mental health questionnaire. This result is in line with the results of the previous studies. Nazer et al., (2000) concluded in their study that among addicts the antisocial personality disorder and anxiety are the most common psychological disorders. Razavi (2003) concluded in his study that depression is common among addicts more than other mental disorders. Parvizfard et al. (2003) concluded in their study that mood disorders and anxiety,
basic depression and disorder of anxiety are common among addicts. Navidian et al. (2002) concluded in their study that borderline, selfish and antisocial personality and mental situations like the low level of tolerance, hopelessness, antisocial behaviors, feeling of humiliation, dependence and severe anxieties are common among addicts. Samei et al. (1999) concluded in their study that inclination toward addiction increases the social and psychological problems of the person. Also, the results showed that the mental health among university students is the same based on age. We could conclude that the mental health of smokers differs from that of non-smokers. When no drug is injected to the body of the addict or in other words, the person suffers from deprivation, he will show signs of mental imbalance besides physical signs. Perhaps the evident feature of this state is due to his impaired aggression, impulsivity and interpersonal relations. Anxiety and depression are also part of the main identified consequences of addiction or drug dependence and create chains of other disorders in return. According to what has been mentioned above, it could be said that basically mental dependence has precedence over the effect of addiction on the body. Moreover, it seems that one of the major factors that causes the inclination of people toward addiction is the problem of stress, escape from stress and taking refuge in addiction; so stress and anxiety could be a factor for inclination of people toward addiction. Thus, a lot of stress and anxiety disrupts the mental balance of the person and causes the emergence of kinds of mental disorders; so it's more probable that addicts have a worse situation mentally due to the presence of many stresses and anxieties in their lives. Among the effective solutions that could act as the prediction of young people's addiction to the consumption of cigarette are:

Parents should teach the factors of "goodness" and "badness" to their children. They should teach them good moral values, proper social behaviors, the society's expectations of a responsible teenager, the importance of the growth and development of the teenager for the development of the society in which he lives, and so forth. They should be serious, responsible and alert to the implementation of rules and regulations pervading home, educational environment and the community. Observance of disciplinary laws and codified rules and regulations which are implemented in educational environments, could become an obstacle to many social deviations. Importance of order and discipline, having justified behaviors, healthy thinking way, etc., are valuable points that could be taught to young people. They must know any kind of access to cigarette is followed by what crimes and what punishments they must suffer. Holding conferences in relation to the enhancement of self-esteem, self-restraint and self-confidence. The interpretations of the youth in relation to their capabilities and talents has the most important impact on their self-esteem.

As the availability of drugs is one of the major factors of addiction, firm and fundamental struggle against the production and distribution of drugs and severe control of boundaries in the society is a vital issue for most people.

REFERENCES