Comparing General Health, Sensation Seeking and Happiness in Random and Non-random Samples: The Case of Islamic Azad University Students

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Abstract

This article tries to compare general health, sensation seeking, and happiness between random and non-random samples; the case of Islamic Azad University students. Sample in this study include 200 students from above mentioned University. Instruments include: the General Health Questionnaire, Zakerman sensation-seeking questionnaire, The Oxford Happiness Questionnaire. Descriptive statistics used to analyze the data, which include: calculating the frequency, percentage, average and standard deviation. Besides that, in order to calculate inferential statistics, Multivariate Analysis of Variance or MANOVA has been used. The results proved that there was no significant correlation between general health and happiness in two variables, but there was a significant correlation between two mentioned groups in happiness factor.

Keyword: General Health, Seeking Sensation, Happiness, Random and non-random Samples.
Introduction

It deems that samples which have been chosen by sampling method from the society may be different from each other. There are two general sampling methods: random and non-random sampling. Random sampling refers to as possibility sampling because everyone has equal chance to be participated, and the only factor for choosing is chance. The possibility to be chosen as sample for each person in the society is unknown. We cannot refer to sample which selected by non-random sampling method to society, so we are not able to generalize results to society (Hasanzade, 2011).

Random sampling divided into branches; this sampling method is simple sampling. In this method, the chance for being selected is equal for all people in society. Another method of random sampling is regular sampling. In this method, samples will be selected from a described society. Another sampling method is categorized sampling. In categorized sampling, society divided into category and people with same and different features will be selected. When people categorized in homogenous groups or sub-group, the proportion of each group calculated and then the calculated ratio in each group multiplied to sample size. So the number of people in each group will be revealed. The reason to carry out this study is to compare general health, sensation seeking and happiness among students of Islamic Azad University by random and non-random sampling’ (Hasanzade, 2011).

General health was selected as one of the variables in random and non-random sampling. Goldstein believes that, general health is a balance between human and environment to reach the self-actualization. Cohen cite that, general health is a status of maturity (psychological). It includes the utmost of effectiveness and satisfaction gained from individual and social interactions, and positive feedback to you and others (Milani far, 2010). In current societies and especially by entering 21st century, most of the people have information about different aspects of health. Parents get this information via media and children receive it from institutions. Unfortunately, maximum of the society doesn’t care about general health; it is because of lack of the knowledge. One of the important principle of general health is self-esteem or self-value, because it organizes important features of a person and it has effects on the other personal features of a person. Lack or absence of self-esteem stop development the other personality features and maybe it cause different psychological diseases such as depression, aggression, timideness (Biaban gard, 2011).

The second variable for comparing between random and non-random sampling is seeking sensation. From the beginning, humankind tries to understand confused sensation or passive sensation and find reasonable answers. Hippocrates from the ancient believes that, there are four temperament, each conquered by fluid matter, cause unique condition in the body. Aristotle was the first person proposing that matter among physiological and psychological sensation. Philosophers in 18th and 17th century believe that excitement or affection are instinctive and irrational features; and compromises animal aspects of humankind. On the other side, there are wisdom and mind to curb these turbulent sensation, and help human to behave. According to WHO (world health organization) general health is the ability of individual to connect to the others and the ability to change and reform the around environment and solve the sensational conflicts through rational solutions. According to Kaplan, general health is continuous
consistency with unstable situations and trying to practice balance between internal demands and requirements in ongoing situations (Mirkamali, 2011).

Seeking sensation is one of the personal features, which organized based temper, motivation and optimized level of stimulation. According to Zakerman (1979) the structure of seeking sensations is related to motivation that received from main nerve system and spinal cord; he continues that seeking sensation is an attribute that needs excitement and complicated and different experiences and fond of doing dangerous physical tasks. Excitement is a body of physical and mental reactions which human and animal often do when face to phenomenon. Excitements and motivations compromise our feeling both and have close relation. Furthermore, excitements and main motivations give direction and activate to our behavior (Alimohammadi & Azarbaijani, 2010).

The third variable in the current study is happiness, which used to compare random and non-random samples. Happiness is one of the most important requirements of mental of human being, it has important role to form personality and general health. Every one ask happiness for people around them and the people they like. Plato in his book “Republic” refers to three elements in human nature. These elements include: mind power or logic, feeling and desires. He believes happiness as one of the human status which make balance and consistency among these three elements. Aristotle believes that at least there are three kinds of happiness. in the lowest level, they believes happiness as the joy. Happiness in the upper level is success and victory. The third kind of happiness is the spiritual happiness. He believes that the real happiness does not gain via satisfying the desires, but doing a task which has moral worth to do (Alimohammadi & Azarbaijani, 2011).

On the other side, non-random sampling divides into many branches. one of them is available sampling, it also refers accidental sampling. The reasons to choose the samples are availability and easiness. Another sampling method is subsidiary sampling, in this method researcher tries to relation or features of the society taken into account. Targeted sampling also called judgmental sampling, in this method researcher tries to choose samples by efforts and self-judge. It represent the society. Network sampling also referred to as chain sampling, is a targeted sampling. In this method, a member of the network presents new member to the society; and the new member presents another new member.

According to the above-mentioned information, present study tries to investigate the following hypothesis:

1) There is significant correlation in general health between random and non-random samples of Islamic Azad university students.
2) There is significant correlation in seeking sensation between random and non-random samples of Islamic Azad university students.
3) There is significant correlation in happiness sensation between random and non-random samples of Islamic Azad university students.
Method
Research method of this study is ex post facto. Besides, this article tries to compare general health, seeking sensation and happiness between random and non-random samples of Islamic Azad University students.

Population, sample, sampling method
Population is all the students, studying in Islamic Azad University in year 2014-2015. About 200 students selected as ultimate sample, 100 by random sampling, 100 by non-random sampling.

Research instruments
General Health questionnaire
General Health questionnaire includes 28 questions which presented by Goldberg and hillier, that has 4 subsidiary scale. Each questionnaire has 7 questions. It is prepared by Goldberg and hillier to segregate mental disordered patients who have referred medical doctor (maadani, 2011). This research has used a short form, consisting 28 questions. General health questionnaire has 4 subsidiary scale which includes: physical signs, anxiety signs, disorder in social action, hard depression. Scoring method is as same as Likert scale, each question has 4 selections and the range of marks was 84 to zero. By gaining the higher marks, it means that disorder is harder. Results of the previous studies acknowledged the authenticity of GHQ-28. Spier and chiong (1994) believe that general coefficient stability of this questionnaire is %55, and coefficient stability reports for Physical Health, Depression and anxiety was 42% to 74%. Yaghoobi (1995) cited that coefficient stability for this questionnaire is 91%. Coefficient stability of sub tests was 50% to 81%. Mirhakak (2001) reported 86% coefficient stability for this questionnaire. Aghajani (2001) reported 82% coefficient stability for this questionnaire. Coefficient stability of bit tests for physical health was 62%, anxiety 92% depression, 86% and social operation was 78%. Goldberg et.al (1979) reported 78% for the coefficient among data presented form two questionnaires, SCL90 and GHQ-28 on the 244 participants. Audrey and George in Nigeria, evaluated the stability of 28- questionnaire on 277 participants, the produced stability was 82% and 85% (Saadati shamir, 2004).

Oxford Happiness Questionnaire
In the present study, in order to test the happiness Oxford Happiness Questionnaire has been used. It includes 29 questions, and the answers were similar to 4 levels Likert which rated from zero to three. Argail et.al calculated 80% for the stability of Oxford Happiness questionnaire by taking benefit from the coefficient of Cronbach's alpha. The reported results of retest after seven weeks period were 78%. The concurrent calculated stability was 43% by using friend’s individual evaluation. In a study done by Alippoor and Noorbala (1999), the sample includes 101 students of Tehran universities. The internal homogeneity coefficient reported for men and women was 94%and 9%, respectively. And the result of retest validity after 7 weeks period was 78% and the coefficient stability of with 3 weeks interval in a 25 samples was 79% for each sample.
Seeking sensation Zakerman questionnaire
Zakerman made 40 articles questionnaire named seeking sensation scale. In the middle of making this questionnaire, he has tried it on many people, those their behavior was consistent to seeking sensation. They were volunteer for psychological test, to experience some adventures, especially whom their job was joint with physical risk such as officers and drivers and those who have experienced drugs and different sexual situations. The marks of the participants, compared with people who did these chores with their will and consent. The people who have did these unusual and dangerous chores, gained high scores, and the people who do chores lack of risk gain lower marks in seeking sensation questionnaire. Investigating the validity, stability of the students of Tehran’s technical university. In this line, 668 people chose by random method have been participated. Findings of the research at first, recommends that we can use seeking sensation Zakerman scale as a simple and reliable in order to test the level of seeking sensation. Because it was reliable, valid and stable.

Finding
Table1: indexes related to descriptive statistics of samples, mean and standard deviation analyzed for variables.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Group membership</th>
<th>Number</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental health</td>
<td>Random sample</td>
<td>100</td>
<td>90.67</td>
<td>14.39</td>
</tr>
<tr>
<td></td>
<td>Non-random sample</td>
<td>100</td>
<td>91.99</td>
<td>11.63</td>
</tr>
<tr>
<td>Sensation seeking</td>
<td>Random sample</td>
<td>100</td>
<td>63.50</td>
<td>3.97</td>
</tr>
<tr>
<td></td>
<td>Non-random sample</td>
<td>100</td>
<td>63.16</td>
<td>5.36</td>
</tr>
<tr>
<td>happiness</td>
<td>Random sample</td>
<td>100</td>
<td>59.87</td>
<td>4.82</td>
</tr>
<tr>
<td></td>
<td>Non-random sample</td>
<td>100</td>
<td>57.00</td>
<td>5.59</td>
</tr>
</tbody>
</table>

Before testing the hypothesis related to research, at first preconditions have been analyzed. So, the results related to Box test for parallelism Covariance Matrix has been checked. Dependent variables has been investigated at different levels. The lack of coefficient relation in statistics of F in this test shows that parallelism of Covariance Matrix of dependent variables is independent at different levels. Table 2 shows the results of Box test for investigating parallelism of covariance variables.

Table 2: Box test results for investigating parallelism variables covariance of the current study

<table>
<thead>
<tr>
<th>Box value</th>
<th>f</th>
<th>Df1</th>
<th>Df2</th>
<th>Meaningful relation</th>
</tr>
</thead>
<tbody>
<tr>
<td>27.34</td>
<td>4.48</td>
<td>6</td>
<td>28</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Table 2 shows that findings are meaningful at each three variables and the level was %05. (P<%05), so the precondition of parallelism of covariance is not acknowledged.
Next step, the results of Lewin test for investigating parallelism of covariance variables has been checked. The lack of meaningfulness of F statistics in this test shows that covariance variables in the current study were parallel. Table three shows investigation results of this precondition.

**Table 3**: results of Lewin test for investigating parallelism variance variables such as general health, seeking sensation and happiness

<table>
<thead>
<tr>
<th>Research variables</th>
<th>F</th>
<th>Df1</th>
<th>Df2</th>
<th>Meaningful</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental health</td>
<td>4.99</td>
<td>1</td>
<td>198</td>
<td>0.026</td>
</tr>
<tr>
<td>Sensation seeking</td>
<td>7.23</td>
<td>1</td>
<td>198</td>
<td>0.008</td>
</tr>
<tr>
<td>Happiness</td>
<td>1.87</td>
<td>1</td>
<td>198</td>
<td>0.172</td>
</tr>
</tbody>
</table>

As shown in table 3, the F value for Lewin test in all variables except happiness is meaningful. And the presumption of balance between variances is not accepted. The analysis of results of inferential statistics, applicable to predetermined hypothesis and resistance to equality of variances. But in one condition, the skewness of diagram was long and variance of one group was not three times more than one group. So according to robust principle, when the random sampling and measuring scale and unequal variance and the distribution of marks was not normal, the researcher should parametric tests.

Table 4 shows the results of parametric tests; is there any significant relation between the mean of marks of general health, seeking sensation, happiness, random and non-random samples?

**Table 4**: Results from the multi variables variance

<table>
<thead>
<tr>
<th>Statistical index</th>
<th>Value</th>
<th>F</th>
<th>Df1</th>
<th>Df2</th>
<th>Meaningful</th>
<th>Effectiveness value</th>
<th>Statistical power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pillai's trace</td>
<td>0.073</td>
<td>5.08</td>
<td>3</td>
<td>193</td>
<td>0.002</td>
<td>0.073</td>
<td>0.91</td>
</tr>
<tr>
<td>Wilk's Lambda</td>
<td>0.927</td>
<td>5.08</td>
<td>3</td>
<td>193</td>
<td>0.002</td>
<td>0.073</td>
<td>0.91</td>
</tr>
<tr>
<td>Hotelling’s Trace</td>
<td>0.079</td>
<td>5.08</td>
<td>3</td>
<td>193</td>
<td>0.002</td>
<td>0.073</td>
<td>0.91</td>
</tr>
<tr>
<td>Roy's Largest Root</td>
<td>0.079</td>
<td>5.08</td>
<td>3</td>
<td>193</td>
<td>0.002</td>
<td>0.073</td>
<td>0.91</td>
</tr>
</tbody>
</table>

As shown in table 4, each four multi variables tests, analyzed to find meaningful significant. In other words, among mean of random and non-random sample at least there is difference in one dependent sample. (p<5)

**Table 5**: The results of effects test

<table>
<thead>
<tr>
<th>Source</th>
<th>Dependent variable</th>
<th>Mean of squares</th>
<th>Df</th>
<th>Total squares</th>
<th>F</th>
<th>Meaningful</th>
<th>Effectiveness value</th>
<th>Statistical power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group membership</td>
<td>Mental health</td>
<td>94.67</td>
<td>1</td>
<td>94.67</td>
<td>0.567</td>
<td>0.453</td>
<td>0.003</td>
<td>0.116</td>
</tr>
<tr>
<td></td>
<td>Sensation seeking</td>
<td>10.70</td>
<td>1</td>
<td>10.70</td>
<td>0.488</td>
<td>0.486</td>
<td>0.002</td>
<td>0.107</td>
</tr>
</tbody>
</table>

http://www.ijhcs.com/index.php/ijhcs/index
As shown in table 5, the analysis of single variance shows the difference of two groups in happiness variable. Besides, there is investigating the meaningful relation between, general health, seeking sensation and happiness. Table 5 shows the results.

**Discussion and conclusion**

The current article tries to compare general health, seeking sensation and happiness on the students of Islamic Azad University, Ahwaz branch. The results have shown that happiness variable had difference on the two groups. But in the others variables such as seeking sensation and general health there were no significant relation. By analyzing the findings, in another words, in line with other researchers and studies, our findings acknowledged previous findings. For example, in a research conducted by Soleimani(2010) on general health of students with random samples, the results have presented the mean of general health of students; students have %68/9 general health and little more than%30 of students have signs of lack of general health. In general, %68/9 of participants have genear; health and %30/4 was suspisous to one of the disorder problems. Among men and women there was no significant difference. In a research, Ghasabadi, Mehrabi and Semnani (2011) carried out a research on general health of students by collecting nonrandom samples. For marking, Likert scale has been used, the mean was 84 and SD was %90 which approximately was equal. So it can be concluded that, the findings is in line with the results of previous research. Arghavanifar (2013) conducted a research to investigate the level of happiness and sensation seeking in the students. The researcher concluded that people describe happiness as a positive evaluation of their lives; by paying attention to happiness of society and its predictors; the present research aims to investigate the level of happiness of students of Ilam and its predators. It was a sectional research, the desired information acquired by distributing questionnaires to 370 students. The findings show that the level of happiness of students is at middle. The correlation among dependent variables such as satisfaction, consistency, self-esteem and targeted was meaningful but reverse. On the other side, the difference of mean of happiness according to answers of married students and how they spend their free time was meaningful. There was not meaningful relation among variables such as age, sex, alienation with dependent variables. Step by step of Regression analysis shows that variables such as satisfaction of life, consistency, self-esteem and targeted is entered into equation in 5 steps. Finally, more than 73 percent of changes of dependent variables explained the happiness.

So, it can be concluded that in current society and especially by entering into 21st century most of people have information about health principles related to different aspects of physical health. Parents are informed by media, children receive information via institutions. Unfortunately, majority of the society does not care about mental health of self-respect or self-esteem. One of the most crucial point in mental health is self-esteem that it forms important personality features of human being and influences on the other human personality aspects. The lack of self-esteem makes disorder even people became mental ills such as depression, timidity, aggression, fear, seeking sensation and happiness (Biabangard, 2011).
References


