Abstract

The purpose of the present study was to investigate the relationship between different types of Holland’s Personality Types and sensation seeking in the firemen and the clerks of municipality in Zanjan city (in Iran). Self-directed Search questionnaire of Holland (SDS) with 6 types of personality (Realistic, Investigative, Artistic, Social, Enterprising, Conventional) and Zuckerman’s SSS-V which had 4 subscales (thrill and adventure seeking, experience seeking, disinhibition, and boredom susceptibility were completed by the participants. The sample consisted of 40 clerks of municipality and 53 of firemen. The data were analyzed using Pearson correlation and stepwise regression methods. The results indicated that in both groups of firemen and clerks Investigative personality type most strongly predicted sensation seeking. Also the results showed that sensation seeking was high in firemen. And the firemen were more likely to be investigative in comparison with clerks of municipality. The results can be used for organizations in order to employ the bests for each job.

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Keywords: Holland’s personality types; sensation seeking; firemen; municipality clerks

1. Introduction

Holland’s (1973, 1985a, 1997) theory of vocational choices states that people can be categorized by six personality types: Realistic(R), Investigative(I), Artistic(A), Social(S), Enterprising(E), conventional(C). Holland’s theory also proposes that people choose vocational environments that are compatible with their needs, values, and general traits. People who have higher levels of congruence between their personality types and work environment are more likely to have higher levels of job satisfaction and longer tenure at their job. In contrast, incongruence is associated with greater likelihood of job satisfaction, poor performance, and job change. John Holland believed that personality and vocational choices are related: “If vocational choices are constructed as an expression of personality, then they represent the expression of personality in work, school subjects, hobbies, recreational activities, and preferences. In short what we have called ‘vocational interests’ are simply another aspect of personality...if vocational interests are an expression of personality, then it follows that interest inventories are personality inventories” (Holland, 1973, p.7).
Some researchers stated that for occupational counseling, it is better to assess not only occupational interests but also abilities, personality characteristics related to the job be assessed. (Chartrand, Bertok, 1993; Lowman, 1996; Subiche, Billingsley, 1995; Swanson, 1993).

Zuckerman defined ‘Sensation seeking’ as a trait defined by the seeking of varied, novel, complex and intense sensations and experiences, and the willingness to take physical, social, legal, and financial risks for the sake of such experiences” (1994, p. 27). Zuckerman (1979) views risk taking as a consequence of sensation seeking. Then he states that persons with a strong sensation seeking trait value the need for change and are likely to experience strong, positive affect feeling in situations of great novelty and risk. Musolino and Hershenson (1977) asked personnel specialists to rank 10 occupations according to the amount of risk taking involved in the job, with risk taking defined as placing the safety of oneself or others in Jeopardy. The listing in order of judged riskiness as test pilot was judged to be the riskiest followed by air traffic controller in second place and policeman and fireman in third and fourth ranks for riskiness. The least risky occupations was judged to be librarian, the next least risky was civil service-clerical, and the next was accountants (Zuckerman, 1994, p. 168). This can be concluded that fireman as people who tend to risky jobs may have high sensation seeking, one of the questions of this study is whether the sensation seeking of the firemen in comparison with clerks is high or not, and what kind of personality types according to Holland’s theory is determined in firemen and clerks of municipality.

Zuckerman et.al (1972) found that there was a relationship between sensation seeking and PF’s 16 of cattle that those people with high sensation seeking were high in impulsiveness, dominancy, extroversion and maladaptiveness. Many studies found that the characteristics of people with high sensation seeking is associated with their vocational interests and choices. (Best, Kilpatrick, 1977; Biersner & Lla Rocco, 1983; Kish, Donnewerth, 1969; Oleszkievicz 1969; Oleszkievicz, 1982; Roberti, 2008; Waters et.al., 1976; Zaleski, 1984).

Zuckerman considering the vocational preference of sensation seekers stated that occupations that are varied and unpredictable and have physical risks are more interested by these people (1972). Occupations, in which the need for stimulation and novelty and variety is high, are attractive for sensation seekers. Analyzing sensation seeking indicates that adventurous occupations and those that are not conventional are suitable for sensation seekers.

2. Methods

The sample consisted of 53 of the firefighters and 40 clerks. After getting the necessary permissions from related organizations, the firemen and clerks of municipality in Zanjan city (in Iran) were asked to complete the SDS and SSS-V. The samples were all men ranged in age from 20 to 50 years old.

The instrument of the present study was The SDS: The Self-directed Search (SDS; Holland, 1994) is a selfadministered, self-interpreted instrument designed to provide career guidance for students and adults. It has 228 items and is one of the most widely used instruments measuring Holland’s six vocational interest types. This instrument has 228 item designed to assess how closely individuals identify with each of the six Holland interest types and is composed of five parts: Activities, competencies, occupational preferences, self-ratings of ability I, and self-ratings of abilities II. Holland (1985) reported reliability estimates ranging from 0.70 to 0.89 as well as evidence of concurrent validity. And the other instrument was SSS-V. In order to measure the construct of sensation-seeking, Zuckerman (1994) developed the sensation-seeking scale V. This instrument was designed to measure the four factors of the construct of sensation seeking. The Thrill and Adventure Seeking (TAS) factor is defined as sensation seeking through risky and sports and other activities such as fast driving. Next the Experience Seeking (ES) factor is defined as sensation seeking through use of mind and sense and experiencing a non-conforming lifestyle. In addition, the Disinhibition (DIS) factor is defined as sensation seeking through social stimulation and disinhibition through social drinking. Boredom Susceptibility (BS) factor is defined as an aversion to monotonous situations and being restless to when exposed to new situations. 10 score belongs to each of the factors and the total score is gained through the sum up of all the factors scores.

3. Results and Discussion

The present study investigated the relationship between Holland’s personality types and sensation seeking in firemen and clerks of municipality.
The first question of this study was there any relationship between personality types and sensation seeking in municipality clerks? To answer these question statistics method of Pearson correlation coefficient was used that the results are shown in Table 1.

1. The Result of Pearson Correlation Coefficient of Relation of personality Types and sensation seeking in the clerks of municipality

| BS | DIS | ES | TAS | Realistic | Investigative | Artistic | Social | Enterprise | Contradition |
|----|-----|----|-----|----------|--------------|---------|-------|-----------|-------------|
| 0.22 | 0.21 | 0.36(*) | 0.14 | N | N | N | N | N | N |
| 0.16 | 0.19 | 0.02 | 0.38 | | | | | | |

The result of Pearson correlation Coefficient indicated that there is a positive significant relationship between Realistic type and experience seeking (r=0.0367, p<0.05) in this group. In the other personality types other than Realistic, there was no significant relationship with none of sensation seeking subscales.

The second question of this project was whether there is a relationship between personality types and sensation seeking in firemen?

The result of correlation Pearson Coefficient indicated that except the relation between social and Enterprising with experience seeking scale and realistic type with experience seeking scale and Boredom susceptibility scale which were not significant (p<0.05) in all other types and all other scales of sensation seeking there was positive significant relationship in firemen (P<0.05). The results indicated that the correlation between personality types and sensation seeking was more in firemen in comparison with clerks. Also these results indicates that between these two groups there is difference in that in firemen between Realistic types and experience seeking scale there was no relationship while in clerks there was positive relationship between Realistic type and experience seeking scale.
Table 2. The results of Pearson correlation Coefficient of the relationship of Holland’s personality types and sensation seeking in firemen and clerks of municipality

| BS       | DIS       | ES       | TAS       | Pearson Correlation | Reali stic Sig. (2-tailed) N | N | N | N |
|----------|-----------|----------|-----------|---------------------|-----------------------------|---|---|---|
| .25      | .35(**)   | .03      | .38(**)   |                     |                             | 53 | 53 | 53 |
| .06      | .009      | .78      | .005      | Sig. (2-tailed)     | N                           | 53 | 53 | 53 |
| .47(**)  | .39(**)   | .34(*)   | .38(**)   | Pearson Correlation | Inves tigative               | N | N | N |
| .00      | .003      | .01      | .005      | Sig. (2-tailed)     | N                           | 53 | 53 | 53 |
| .43(**)  | .35(**)   | .29(*)   | .35(**)   | Pearson Correlation | Artis tic                   | N | N | N |
| .001     | .008      | .03      | .009      | Sig. (2-tailed)     | N                           | 53 | 53 | 53 |
| .28(*)   | .36(**)   | .21      | .32(*)   | Pearson Correlation | Socia l                    | N | N | N |
| .04      | .007      | .12      | .019      | Sig. (2-tailed)     | N                           | 53 | 53 | 53 |
| .36(**)  | .40(**)   | .22      | .36(**)   | Pearson Correlation | Enter prising               | N | N | N |
| .008     | .003      | .11      | .008      | Sig. (2-tailed)     | N                           | 53 | 53 | 53 |
| .42(**)  | .48(**)   | .34(*)   | .34(*)   | Pearson Correlation | Cont raditional             | N | N | N |
| .001     | .00      | .01      | .01      | Sig. (2-tailed)     | N                           | 53 | 53 | 53 |

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

Table 3. The Comparison of personality types and sensation seeking subscales by independent T-Test in firemen and clerks of municipality

| S2 (2-tailed) | Sig. (2-tailed) | T-Value | Std. Deviation | Sig. | Z-Value | Cor. |
|-------------|-----------------|--------|----------------|------|---------|------|
| .07         | -1.78           | 7.82   | 2              |      | 0.27    | 0    |
|             |                 |        |                |      | 9.82    | 2    |
|             |                 |        |                |      | 3.64    | 3    |
| .52         | .63             | 6.61   | 1              |      | 2.75    | 0    |
|             |                 |        |                |      | 8.10    | 1    |
|             |                 |        |                |      | 1.75    | 3    |
| .22         | -1.22           | 7.40   | 1              |      | 2.10    | 0    |
|             |                 |        |                |      | 7.82    | 1    |
|             |                 |        |                |      | 4.05    | 3    |
| .37         | .89             | 46.85  | 2              |      | 8.85    | 0    |
|             |                 |        |                |      | 9.57    | 2    |
|             |                 |        |                |      | 2.94    | 3    |
| .04         | -2.03           | 9.26   | 1              |      |        |      |

Realistic
Investigative
Artistic
Social
Enterprising
Table 3: The Result of independent T -test indicated that there is a significant difference between firemen and the clerks of municipality in Enterprising Personality type (t=-2.033), Boredom susceptibility (t=-2.744) and the total score (t=-2.043). The comparison of the Means indicated that firemen were more enterprising than municipality clerks and the score of firemen in boredom susceptibility and the total score of sensation seeking in comparison with the clerks were higher.

The results of Zaleski’s research indicated that the scores of sensation seeking was related to occupational choices. Jobs like firemen in comparison with sport related jobs, had a higher scores in in experience seeking scale of sensation seeking. in a research done by Oleszkiewicz, (1982) indicated that the occupations of new experience and emotions (ie, sport related jobs, surgery, journalists) attract people that have a high score in total score of sensation seeking, adventure seeking, and susceptibility.

Table 4: The result of multi variable regression analysis of sensation seeking by personality types in clerks of municipality

| Model | R | R Square | F | Sig | F=5.242 |
|-------|----|----------|----|-----|---------|
| 1     | .028 | .121  | .348 | Investigative |

a Predictors: (Constant), Investigative

The results of multivariable regression indicated that The personality types can predict sensation seeking, the result of multi variable regression analysis indicated that F is significant (α<0.05). Also r^2 indicated that, among personality types, investigative personality type (F=5/242) predicted 12.1 percent of variation of sensation seeking.
The 4th question of this project was that how much personality types can predict sensation seeking in firemen? Multivariable regression was used to consider this question. The results are shown in table 5.

The results indicated that among personality types, investigative personality type can predict 26/1 percent of the variation of sensation seeking in firemen (F=18/023). These results indicate that investigative personality type in firemen in comparison with clerks more predict sensation seeking.

These results indicated that personality characteristics like sensation seeking and occupational interests and personality types can be used to determine what job is best for people with different interests and characteristics. Finally it is suggested that other jobs considering personality types and sensation seeking be examined.

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