The Relationship between Personality Traits and Intrinsic Motivation and Self-efficacy of faculty members of ACECR

Javad Rahmani Dolat Abad1*, Fateme Golshani2, Souzan Imamipour3, Fariba Hassani4

1 MA in Educational Psychology, Islamic Azad University, Central Tehran.
2,3,4 Assistant Professor, Department of Psychology, Islamic Azad University, Central Tehran

ARTICLE INFO

Article history:
Received 09 Apr 2016
Received in revised form 13 May 2016
Accepted 30 May 2016

Keywords:
Personality traits,
Intrinsic motivation,
Self-efficacy,
Competence,
University Jihad

ABSTRACT

Objective: This study aims to determine the relationship between the five factors of personality and intrinsic motivation and self-efficacy and as well as predictability of self-efficacy based on the above two variables. The research is descriptive with correlational design. Methodology: The study population included all faculty members of the ACECR (about 600 cases) and sample of the study was estimated to be 234 participants based on Cochran formula at confidence level of 95%. Forms were distributed to all members and ultimately, 245 people participated in the study. 32.1% of the participants were female and 67.9% were male. Three instruments of the five great factors of personality (short form), Amabile job preference inventory and Sherer's General Self-Efficacy Questionnaire were used to collect data. Results: Results showed that personality dimensions and intrinsic motivation generally had a relationship with self-efficacy. There was a negative significant relationship between neuroticism and self-efficacy; however, other personality characteristics (e.g., extroversion, openness, agreeableness and conscientiousness) had a positive significant relationship with intrinsic motivation. Simultaneous multiple regression analysis showed a relatively strong correlation between the independent variables and dependent variable. It was also found that these variables explained 51.8% of self-efficacy. Conclusion: Conclusion: The findings of this study confirm the relationship between personality and intrinsic motivation and self-efficacy and predictability of self-efficacy based on these two variables.

1. Introduction

In the knowledge-based organizations (the organization that its' main asset is knowledge capitals)- where University Jihad is one of such organizations- human resource is the most important factor of value creation, and competitive advantage creation and maintenance. Human resources are one of the key factors in the formulation of visions, goals and strategies of organizations and organizational strategic goals will not be achieved without adequate human resources. Therefore, human resources, especially in knowledge-based organizations are known as the central priority (Asili, 2011). For this reason, access to models for the identification and recruitment of appropriate human resources is of high importance. One of the most widely used models that have been created to meet this need is the meritocracy model. Meritocracy was seen as the process of the creation of attitudes, behavioral and moral patterns with stable values using scientific methods and principles to attract, use and cultivate manpower (Memarzade et al., 2012). Personal aspect is one of the competency aspects. Conceptually, those main features of personality, which highlight a person's ability to perform a task or activity; that is, how do people behave in the implementation of activities or work, how are their main characteristics of personality as well as behaviors (Jazini and Navaei, 2014)? Psychology is the science that would be used in this context. Several psychological theories tried to study human and explain human behavior over the past centuries. Social-cognitive theory is a theory is that Bandura has tried to shape it. Albert Bandura extended the concept of self-efficacy as a part of the important social learning theory (Redmond, 2014). Self-efficacy refers to the "individual's belief in his abilities to successfully accomplish a task or job" (Seif, 2013). Self-efficacy beliefs determine that individuals consume energy for their activities and to what extent resist against obstacles (Zeinali

* Corresponding author: Rahmani_d@jihad.com
DOI: https://doi.org/10.24200/jsshr.vol4iss02pp69-75
In general, when people believe that they have capabilities and abilities to do a work or activity, they would spend more time to do the task and eventually will achieve better results (Zeinali Pour et al., 2009). Self-efficacy is an important factor in the system producing human competence. Effective performance requires both the skills and belief in the ability to do those skills (Soleimani and Hoveida, 2013). If such a belief is reinforced and other environmental and organizational conditions are met, the person can cope with the challenges in the workplace and achieve success. The result would be organizational success in achieving the pre-planned objectives (Asarzade et al., 2011). One (other) concept considered in the development of human resources is intrinsic motivation of employees (Ziaei et al., 2008). In general, intrinsic motivation is intensive passion and positive emotion that people gain from their work. Organizations require motivated and productive employees to respond to environmental demands and remain in a competitive environment; employees who work completely in line with the objectives of the organization. It is intrinsic motivation that causes a long-term effort without environmental compensation (Kadivar, 2011). Intrinsic motivation grows when a person tries to achieve exciting criteria. In this case, potential self-efficacy perception is provided to achieve the traditional criteria and if the person achieves an outcome, he will find a positive self-assessment (Abolghasemi and Javanmardi, 2012). Past research in the field of organizational behavior emphasized the effect of situational factors on organizational variables but mood approaches contrary to the traditional research suggests that personality traits, values and motivations are better predictors of organizational behavior because such elements are constant and have a more stable effect on the attitudes and behaviors of employees in businesses and organizations (Hashemi Sheikh Shabani et al., 2012). Personality represents those characteristics of the person or persons that include fixed thinking, emotional and behavioral patterns (Parvin, 2010). Among the predictors of job success, personality characteristics are superior to other features due to their acceptable development and sustainability (Salimi et al., 2006). One of the popular approaches to study individual personality is the traits approach. "Traits can serve three main functions: they can be used to summarize, predict and explain the behavior of the individual (Parvin, 2010). All three functions are of high importance to those involved in the organizations' human resources. Several theories have been proposed in the traits approach; one of the theories is McCrae and Costa. Costa and McCrae (1992) conducted an extensive research program that identified five main factors. These factors include: neuroticism, extroversion, openness, agreeableness, and conscientiousness (Schultz, 2014). The Five Factor Model of personality has been widely accepted in the scientific communities and helped to renew the research on the role of personality in organizational behavior and Industrial-Organizational Psychology (Panaccio and Vandenberghe, 2012). In this study, the relationship between the three dimensions of personality was studied that have a good behavioral predictability. Despite the relative stability, the self-efficacy construct is affected by age and environmental conditions. Intrinsic motivation has more stability, and also can be formed in all ages, has a special emphasis on early childhood (Ghamari, 2013) and personality traits are stable in different situations over time (Parvin, 2010). According to a prominent and direct role of the faculty of University Jihad in achieving the long-term goals and effectiveness of the personal characteristics of the performance of these resources, three attributes of the most important and influential personal traits in predicting job success and the relationship between the traits have been studied in this study and the researcher' question is "are there any relationship between personality traits and intrinsic motivation and self-efficacy of the faculty of ACECR?"

2. Materials and methods

2.1 Methodology and research design

This is a non-experimental (descriptive) correlational study.

2.2 Population, sample and sampling

The study population included all faculty of University Jihad (about 600 people). Sample of the study was obtained by Cochrans formula with confidence level of 95% that included 234 participants. Accordingly, with regard to previous experiences, the questionnaires were distributed between all the faculty of University Jihad across the country and in all subsidiaries, in the form of three papers, email and online form. Ultimately, 251 forms were collected form. Six of them were excluded from the final analysis due to invalid responses and 245 questionnaires (67.9% of males and 32.1% females) were analyzed with SPSS 20.

2.3 Instruments of the study

2.3.1 Personality traits

Costa and McCrae intended to provide a comprehensive personality questionnaire that focused on personality in general rather than just on pathology. Their initial work began only with the three factors (neuroticism, extroversion and openness). Then, they added agreeableness and conscientiousness to their neo model so that the model can involve the five-factors considered in a lot of previous research (Joshanlou et al., 2010). Costa and McCrae designed the NEO FF I Five-Factor Inventory in 1989. It contains 60 items (12 items for each factor) (Daemi et al., 2013). Today, this test is considered as a global model based on factors analysis for reflection of the 5 main factors. The test also could be one of the most comprehensive personality assessment tests because of various studies that have been conducted on different age groups and different cultures. According to McCrae and Costa’s (2004) results, the reliability and validity and reliability of the instrument were confirmed and reliability of the instrument was ranged from 0.68 to 0.83. The reliability and validity of the Iranian questionnaire were approved in numerous studies, including Garousi Farshi’s (2001) study.

2.3.2 Intrinsic motivation questionnaire (work preference inventory)

The Work Preference Inventory aims to assess individual differences in intrinsic and extrinsic motivational directions. It was designed by Amabile et al. (1994) and was introduced in the article under the same title. The test is a self-report instrument and has 30 statements (15 statements for each intrinsic and extrinsic motivation) in a 4-point Likert scale ranging from never (1 point) to always or almost always (4 points). Reliability and validity of the inventory was examined in above-mentioned paper and approved on a sample with 1.055 participants. Amabile et al. (1994) calculated the correlation
between intrinsic and extrinsic motivation with General Causality Orientations Scale and Student Interest and Experience Questionnaire (SIEQ) and showed that the scale is of high construct validity. Translation and adaptation of the inventory were conducted by Persian culture by Sheikholeslami and Razavie (2005). Factor analysis results also indicated its validity. In this study, Cronbach's alpha coefficient was 0.82 (Ghasem and Chari, 2012). Numerous studies, including Kashani, Iranban and Barzegar's study also employed it.

### 2.3.3 General Self-Efficacy Scale
This scale was developed by Sherer et al. (1982). The original version of the test includes 36 items, in which 23 items were kept based on the analyses and remaining items were eliminated by its developers. The questionnaire's developers reported mean of 17 items of general self-efficacy equivalent 99.57 and a standard deviation of 0.812. Reliability of general self-efficacy was obtained and 0.71 and 0.86 (Sherer et al., 1982). The internal consistency of the questionnaire was calculated by Cronbach's alpha that was 0.79. Abdi et al. (2012) showed the reliability of the questionnaire equal to 0.85 and Arabian et al. (2004) calculated it to be 0.91 and Mohammadizade et al. (2014) approved reliability with Cronbach's alpha (0.81).

### 2.3.4 Data collection method
A few inventories were initially distributed in person and then distributed among all the units of University Jihad throughout the country after ensuring meaningfulness of items and familiarity with their possible questions. At the same time, some members and directors were contacted and then explanations were provided on why and how to do the study, complete the questionnaire, ensure confidentiality of data and request explanation of the issue to other members of the respective fields. Then, the online form was emailed to most of the members and those who were concerned about the disclosure of personal information.

### 3. Discussion and results
Pearson coefficient was used to investigate the relationship between personality traits and intrinsic motivation and self-efficacy variables. The results (Table 1) showed a significant negative relationship between neuroticism and self-efficacy. However, there was a positive and significant between intrinsic motivation and self-efficacy and extraversion, openness, agreeableness and conscientiousness and self-efficacy (P<0.01).

<table>
<thead>
<tr>
<th>Agreeableness</th>
<th>Openness</th>
<th>Extraversion</th>
<th>Neuroticism</th>
<th>Intrinsic motivation</th>
<th>Self-efficacy</th>
<th>Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
<td>-0.223*</td>
<td>-0.524*</td>
<td>Intrinsic motivation</td>
</tr>
<tr>
<td>1</td>
<td>-0.432**</td>
<td>0.344*</td>
<td>0.440*</td>
<td></td>
<td></td>
<td>Neuroticism</td>
</tr>
<tr>
<td>1</td>
<td>0.099</td>
<td>-0.168</td>
<td>0.346**</td>
<td>0.217*</td>
<td></td>
<td>Extroversion</td>
</tr>
<tr>
<td>0.422**</td>
<td>0.161**</td>
<td>0.563**</td>
<td>-0.519**</td>
<td>0.340**</td>
<td>0.666**</td>
<td>Conscientiousness</td>
</tr>
</tbody>
</table>

Multiple regression method was used to answer the research question. According to the regression results summarized in Table 2, R or multivariate correlation coefficient is equal to 0.720, which shows that there is a strong correlation between predictor variables and criterion variable. R2 indicates that 51.8% of self-efficacy is related to the combination of predictor variables (conscientiousness, openness, agreeableness, neuroticism, intrinsic motivation and extraversion).

<table>
<thead>
<tr>
<th>Standard error estimation</th>
<th>Adjusted R²</th>
<th>F</th>
<th>R²</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>.28168</td>
<td>.501</td>
<td>.518</td>
<td>720*</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 3 shows the results of analysis of variance that indicates F-test results and its significance. With regard to significance of F-test at error level of less than 0.01, we conclude that our regression model consists of six predictor variables (conscientiousness, openness, agreeableness, neuroticism, extraversion and intrinsic motivation) and criterion variable (self-efficacy) is a suitable model and is approved. In other words, the research predictor variables can explain changes in efficacy score.

### Table 3: Analysis of variance (ANOVA)
To clarify which of the predictor variables can suitably explain our criteria, beta coefficient of predictor variables were calculated and the results are shown in Table 4. This table shows the standard and nonstandard coefficients of the predictor variables. Standard coefficient of intrinsic motivation, neuroticism, extraversion, openness, agreeableness, and conscientiousness are 0.183, -0.267, 0.021, 0.043, -0.067 and 0.452, respectively. Given the significant level, Beta coefficients of three variables of extraversion, openness and agreeableness are not significant and the variables cannot explain self-efficacy. However, Beta coefficients of the predictor variables of conscientiousness, neuroticism and intrinsic motivation are at significance level less than 0.01 and therefore could not explain self-efficacy.

Table 4: Calculation of beta coefficient and significance level for factors affecting self-efficacy

<table>
<thead>
<tr>
<th>Sig.</th>
<th>F</th>
<th>Mean square</th>
<th>df</th>
<th>Total square</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>.000</td>
<td>29.592</td>
<td>.079</td>
<td>165</td>
<td>13.092</td>
<td>Residue</td>
</tr>
<tr>
<td>.000</td>
<td>2.348</td>
<td>6</td>
<td>14.088</td>
<td>Regression</td>
<td></td>
</tr>
<tr>
<td>171</td>
<td>27.180</td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. Conclusion

H1: there is a relationship between personality traits and self-efficacy.

Correlation results confirmed the relationship between personality traits and self-efficacy. There is a negative significant relationship between self-efficacy and neuroticism and extraversion, openness, agreeableness and conscientiousness traits have a significant positive correlation with self-efficacy. Concerning the negative and significant relationship between neuroticism and self-efficacy, the study results are quite consistent with the results of other studies. According to the existing literature on the topic of personality traits, neurotic people tend to experience negative emotions such as fear, anxiety, worry, stress, embarrassment, disgust, pity-seeking, hostility, impulsivity, depression and low self-respect (Costa and McCrae, 1992; Daemi et al., 2013). For fear of facing with unfamiliar situations, these people are not able to close to the duties and are anxious in a case of any obstacle and their embarrassment prevents them from intellectual integrity and optimal performance. Finally, low self-respect of the people is in sharp contrast to feeling self-efficacy that belief indicates confidence to his own abilities. That's why our results are in line with other studies, including a meta-analysis conducted by Judge and Ilies (2002) study, longitudinal studies of Caprara et al. (2011), and Sourati et al.'s (2014) study. However, extraversion and conscientiousness in all of the studies, including the present study have shown a significant positive relationship with self-efficacy. Extraversion represents a dynamic approach to the material and social world and its components are positive and enthusiastic emotions, group-work, activeness, decisiveness and courage, positivity and intimacy (Daemi et al., 2013; Adib et al., 2010). People with high levels of extraversion have a
high motivation to explore and benefit from their expertise. They are ambitious and this makes them focus on mastery and effort in achieving their objectives (Zweig and Webster, 2004). People with these traits will follow the tasks and insist on them with a positive emotion and courage in the face of situations that are unfamiliar to them and increase probability of success and positive experience and finally creation and development of self-efficacy. This issue also governs the conscientiousness. People who are very conscientious, whatever they are more conscientious and more efficient, they will have greater efficacy (Judge et al., 2007). Conscientious people are highly motivated for progress and persistence in doing difficult tasks (Fathi et al., 2014) Conscientious people have control over impulses and think before acting on them. They also respect the laws and norms and are able to organize and prioritize tasks. In addition to these traits, they enjoy regularity in work and effort to success (Costa and McCrae, 1992). Therefore, we can theoretically understand its relation with self-efficacy; the result that was confirmed by all studies.

As the vast majority of the previous researcher, this study represents a significant positive relationship between openness traits and self-efficacy. Openness describes the scope, depth, complexity and creativity of an individual's subjective life, individual's experience, richness of imagination, curiosity about his outer and inner world, liberalism and non-traditionalism. This trait is against the closed mind. Its components include imagination, aesthetics, emotional actions and broad interests and ideas (Daemi et al., 2013; Adib et al., 2010). Curiosity, creativity, diversity and richness of experiences can guarantee their success in most things. Moreover, agreeable individuals can be successful in achieving their goals with right thinking and assistance from others with regard to honesty, altruism, optimism and kindness and trust and humility (Costa and McCrae, 1992). Although some studies have shown a relationship between agreeableness and self-efficacy, as the results of the study confirmed, the relationship between them can be theoretically understood. Since low score on neuroticism and high score on other traits can largely guarantee success and it was approved that successful experiences have a positive effect on creation and increase of self-efficacy, the relationship between personality traits and self-efficacy could be eventually acknowledged.

H2: there is a relationship between intrinsic motivation and self-efficacy.

A significant positive correlation between intrinsic motivation and self-efficacy observed in this study and all of the researches were approved (Taberner and Hernandez, 2011). Intrinsic motivation describes natural tendency towards attraction, mastery, inherent interest and exploration (Ryan and Deci, 2000). Self-motivated people are involved in their tasks because tasks are interesting, pleasant and satisfactory for them (Prat-Sala and Redford, 2010).

Perhaps no word like intrinsic motivation cannot reflect the positive power of human nature, innate tendency to search for new topics and challenges for the development and experience of capacity and exploration to learn things (Harter, 1978). Bandura (1997) defines self-efficacy as the individual's belief in his capabilities to organize and execute actions required to handle various situations and conditions. Self-efficacy affects the activities, efforts and perseverance in accomplishing a desired task. Learners with low self-efficacy would refuse doing things but people who have high self-efficacy cooperate well in activities (Mohammadi Darvish Baghal et al., 2013).

Above-mentioned issues show the strong relationship between motivation and self-efficacy. In addition, they refer to a causal relationship between self-efficacy and motivation. Moreover, individual's perception of a lack of efficiency can also make the motivation of most desirable results ineffective (Parvin, 2010). Motivation as the driving force of behavior provides the ground of efforts and insists on the objectives and these features should be considered in self-efficient people. It is clear that the more the intrinsic motivation, the more effective it will be because it will be more enjoyable and more self-desired for the individual (Ghasem and Chari, 2012). Therefore, the relationship between intrinsic motivation and self-efficacy is partly clear, which was confirmed by numerous studies.

Multiple Regression analysis was used to answer the research question. Results showed that a combination of predictor variables (personality traits and intrinsic motivation) explained 51.8% of self-efficacy. The result indicated that the selective model is appropriate. Beta coefficients of the predictor variables showed that only conscientiousness, neuroticism and intrinsic motivation can predict self-efficacy. According to the definition given in the theories regarding the characteristics of conscientiousness, predictability of self-efficacy could be found. As said earlier, conscientiousness includes features such as self-control, planning and organizing, tolerance of tasks, diligence and competence that each can have a decisive role in one's success in the task. Moreover, neuroticism includes features such as fear, anxiety, worry, tension, embarrassment and most importantly low self-respect can be an effective factor in the lack of success in carrying out the task. According to sources of self-efficacy, including mastery experience that is the most effective way to build and strengthen self-efficacy can show the role of these accomplishments in the development of self-efficacy. This means that those with conscientiousness features and without neuroticism characteristics of are likely to be successful in doing tasks and so the successful experiences lead to increased self-efficacy and self-efficacy is another reason of the proximity to the tasks and achievement of double successful experience. Thus, such people are in a cycle of success and increased efficacy. Moreover, it was said about the relationship between intrinsic motivation and self-efficacy that this relationship is to the extent that all studies approved it and emphasized that intrinsic motivation can predict self-efficacy and that these two variables have a causal relationship.

References

Asarzade, R., Bejani, H., Malekinia, E. 2011. The effectiveness of human resources in organizations and presentation of a conceptual model for its
How to Cite this Article: