




The Relationship between Personality Traits, Self-efficacy and Creativity of Academic Librarians: A Case Study of Librarians of Tabriz University of Medical Sciences

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Abstract

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Introduction: Identifying the human resources' personality traits as the most predominant factor in achieving organizational goals and their impact on their creativity and self-efficacy is essential to improve the quality and quantity of an organization's performance. This study aimed to investigate the relationship between personality traits and self-efficacy and librarians' creativity at Tabriz University of Medical Sciences libraries.

Methods: In this descriptive correlational study, the statistical population included all librarians of Tabriz University of Medical Sciences (N=50). The study instruments consisted of three questionnaires of the NEO Personality Inventory, Sherer's general Self-efficacy Scale, and Raudsepp's creativity scale. Pearson correlation coefficient was used to test the correlation between personality traits with self-efficacy and creativity.

Results: The findings revealed a significant relationship between librarians' creativity and Extraversion, openness to experience, and agreeableness. Besides, there was a significant relationship between personality traits of neuroticism and extraversion with librarians' self-efficacy ($P < 0.01$).

Conclusion: As the impact of personality dimensions on the self-efficacy and the creativity of the librarians, decision-makers and planners should pay particular attention to the personality components of librarians. Creativity and self-efficacy among librarians and other staff can be nurtured by conducting behavioral counseling courses to see greater efficiency and productivity in the organization environment.

Introduction

Today's psychology divides human personality into five categories of extraversion, neuroticism, conscientiousness, agreeableness, and openness to experience, which broadly classify human personality traits (1). Identifying personality factors and assessing their impact on people's beliefs and expectations in doing better career activities leads to creativity and innovation. The results of this assessment can be used to verify the right or wrong choice of personnel scientifically. Corrective measures include conducting courses and workshops on choosing the right job and the position tailored to the staff's personality traits.

Openness personality trait includes characteristics such as imagination and insight, and those who mostly have this trait have a more extensive range of interests than others. These individuals tend to be more adventurous and creative. On the contrary, people who are low in this trait are often much more traditional and may struggle with abstract thinking (2-3). According to Blagg (1985) and McCrae and Costa (1995), extraversion characterized by excitability, sociability, talkativeness, assertiveness, and high emotional expression. Those with high extraversion described as sociable individuals, and enjoy interacting with other people.



Neuroticism is characterized by sadness, moodiness, and emotional instability. Those with high neuroticism tend to experience mood swings, anxiety, irritability, and sadness. Those with low in this trait tend to be more stable and emotionally resilient. Conscientiousness is characterized by having high levels of thoughtfulness, reasonable impulse control, and goal-oriented behaviors. Conscientious people tend to be organized and pay attention to detail. Agreeableness is characterized by the ability to gain the trust of others, altruism, kindness, affection, empathy, and other prosocial behaviors. Those with high agreeableness are more likely to cooperate and, on the contrary, those low in this trait tend to compete and even manipulate others.

Human resources are the most vital component of any organization in achieving organizational goals in the face of the growth of technology and its subsequent transformations in today's world. Human resources can play a critical role in the success of the organization and can improve the quality and quantity of their performance. In other words, confidence in themselves, innovatively introduce new designs and tackle problems and ultimately bring about new changes in their organizational environment are examples of their career, and related organizational development. According to Bandura, self-efficacy is the individual's beliefs and expectations about his or her ability to execute specific tasks or behaviors successfully. Self-efficacy and its beliefs play a crucial role in the individual's career development. From his point of view, the beliefs of humans about their abilities affect their performance (4).

There are some studies related to the present studies that reviewed as follows. Iranzadeh's research examined the relationship between some social factors and individuals' self-efficacy in the organization. Findings showed that gender had no effect on the staff's self-efficacy, but education impacted their self-efficacy (5). Pirkhaefi et al. concluded that there was a negative and significant relationship between the variables of creativity, self-efficacy, and coping with mental health (6). Qarabaghi et al. obtained a significant relationship between flexibility and self-efficacy (7). Ebrahimi Moghaddam and Zeinolabedin concluded that there was a significant correlation between the variables of creativity and self-efficacy with the variable of academic achievement (8). Nazari et al. concluded that there was no relationship between self-efficacy and job satisfaction. So self-efficacy was not able to predict job satisfaction (9). Babaeian et al. concluded that there was no relationship between extroversion traits, emotional stability, flexibility and pleasantness, and job performance, and there was only a relationship between staff responsibility and job performance (10). The study of Jalaefar and Pourahmad examined the relationship between the personality traits of librarians working in Birjand University Libraries and their view of the entrepreneurial climate in the library. They concluded that the average score of librarians' viewpoints toward taking on entrepreneurship in the library for women than men and in undergraduate, postgraduate, and doctoral librarians than diploma and associate librarians were significantly higher (11). In their research, Asadnia et al. concluded that there was a direct relationship between job performance and conscientiousness and extraversion of academic librarians. Besides, variables of conscientiousness and neuroticism were strong predictors of job performance (12). Khaleghkhah and Babaei Menghari concluded that there was a relationship between personality traits and computer self-efficacy. Regression analysis indicated that

extraversion, openness, agreeableness, and conscientiousness predict computer self-efficacy (13). Rahmani Dolatabad et al. found that personality dimensions were generally associated with faculties' self-efficacy, and the relationship between neuroticism and self-efficacy was negative and significant. The relationship between other personality traits (extraversion, flexibility, agreeableness, and responsibility) with self-efficacy was positive and significant (14). Kayal and Das concluded that job satisfaction and personality factors were significantly different in male and female librarians (15). Yildirim et al. concluded that there was a significant relationship between openness and conscientiousness with internal satisfaction. There is also a negative relationship between extraversion and openness with external satisfaction (16). In their research, Mary Jansi and Anbazhagan found that neuroticism had the highest impact on job satisfaction. Extraversion had a negative effect, and openness had a positive impact on job satisfaction (17). In their study, Kim and Chung found that extraversion, agreeableness, and neuroticism had a significant relationship with job satisfaction. Social networks enhance job satisfaction in individuals with high extraversion and low agreeableness (18). Kappagoda's study revealed that extraversion, agreeableness, and conscientiousness of staff had a positive and significant effect, and neuroticism had a negative and significant relationship with job satisfaction (19). Mayer also found that there was a significant relationship between performance and creativity in labors (20). In studying the relationship between the five major personality factors and enhancing job performance, Thoresen et al. found that conscientiousness, extraversion, and openness had a significant relationship with job performance. They found that those with high conscientiousness and extraversion were highly energetic and eager to progress. They found a negative relationship between neuroticism and job performance and performance improvement (21). Timmerman also found a positive relationship between agreeableness, conscientiousness, and job performance, and, in contrast, no relationship between extraversion and openness with job performance. There was also a negative relationship between the level of neuroticism and job performance (22). The findings of Mkoji and Sikalieh also indicated that openness, agreeableness, and neuroticism are the essential variables in predicting staff performance. Their results also demonstrated that the personality traits of staff could be an appropriate tool in measuring employees' job performance (23). A review of previous studies shows that few of these studies have addressed librarians.

As one of the academic centers, libraries are confronting with users and clients with various personalities. However, library staff works together with different personalities. Comprehensive reviews from the perspective of temperament, personality, and its relation to creativity and self-efficacy in these centers are needed so that they can be developed or improved by promoting or modifying them. Therefore, given that librarians working in libraries regularly deal with many patrons, they should be aware of new methods in attracting and retaining users and apply these methods in practice. Since the personality traits of librarians of Tabriz University of Medical Sciences are unknown, the researcher intends to study this issue and examine the relationship between these attributes and their creativity, as well as self-efficacy strategies to enhance these two crucial factors. So the researcher intends to answer the following question:

- To what extent is there a relationship between the personality



traits of librarians with self-efficacy and their creativity in the libraries of Tabriz University of Medical Sciences?

Methods

The present research was a descriptive correlational study. The study population included all university librarians of Tabriz University of Medical Sciences, a total of 50 librarians, selected through census method. The following three questionnaires were used to collect data:

- NEO Personality Inventory (24): This 5-factor questionnaire designed by Paul Costa and Robert McCrae in 1989, consisting of extraversion, neuroticism, conscientiousness, agreeableness, and openness containing 60 questions. All items were 5-point Likert scale and scored between 1 and 5. The minimum score from this questionnaire was 24, and the maximum score of 43. The higher the score, the higher the level of the indicator will be. In Iran, this questionnaire has been localized by Gaross Farshi (25), as well as validity and reliability for these factors has been confirmed.

- General Self-efficacy Scale: Sherer created this scale in 1982 (26). A 17-item questionnaire on a 5-point Likert-type scale scored between 1 and 5 (1=strongly disagree, 5=strongly agree). The score for some questions is reverse. The minimum score on this scale is 17, and the maximum score is 85, so that the higher the score, the higher the self-efficacy will be. The reliability of this questionnaire has confirmed in Ansari Adli's research (27).

- Creativity Questionnaire: A comprehensive questionnaire developed by Raudsepp (28) in 1979 to measure staff creativity

in educational organizations and on an individual's creativity assessment scale. The 50-item questionnaire on a 5-point Likert scale scored from 1 to 5 (1=strongly disagree, 5=strongly agree). This questionnaire, as a standard tool used many times in different studies and its reliability, has approved in numerous researches, such as Ansari Adli (27). The minimum score on this questionnaire is 140, and the maximum score is 202.

The questionnaires were distributed among the librarians of Tabriz University of Medical Sciences libraries. SPSS software version 20 was used for data analysis. Pearson correlation coefficient was used to answer research questions. The level of significance considered to be 99% ($p\text{-value} \leq 0.01$).

Results

Findings revealed that the majority of librarians in libraries of Tabriz University of Medical Sciences (59.5%) are women, as well as the study population is Masters (45.2%), and the lowest is Associate Degree (11.9%). As Table 1 shows, among the five personality traits in the samples, the extraversion factor had the highest mean score (42.26) and neuroticism factor the lowest mean score (34.81). The mean creativity score was 172.35, and the self-efficacy score was 51.6 as well.

Table 2 demonstrates the relationship between NEO personality traits and librarian creativity. There is only a significant and positive relationship between personality traits of Extraversion, Openness, and Agreeableness with librarians' creativity ($P\text{-value} < 0.01$).

Table 1. NEO Personality, Creativity, and Self-efficacy in Librarians

	Variable	Mean score	SD	The lowest	The highest
Personality Traits	Neuroticism	34.81	4.71	24	43
	Extraversion	42.26	3.13	36	48
	Openness to experience	37.45	2.97	32	43
	Agreeableness	38.64	5.04	31	49
	Conscientiousness	41	2.93	34	45
Creativity		172.35	15.78	140	202
Self-efficacy		51.16	6.29	33	65

Table 2. Correlation matrix of NEO personality traits and librarian' creativity

Variable		Creativity	Neuroticism	Extraversion	Openness	Agreeableness	Conscientiousness
Self-efficacy	cc	1					
	p-value	-					
Neuroticism	cc	0.230	1				
	p-value	0.143	-				
Extraversion	cc	0.552	0.317	1			
	p-value	0.000	0.040	-			
Openness	cc	0.449	0.052	0.403	1		
	p-value	0.001	0.745	0.008	-		
Agreeableness	cc	0.334	0.115	0.463	0.187	1	
	p-value	0.001	0.468	0.002	0.237	-	
Conscientiousness	cc	0.201	-0.294	0.090	0.258	-0.090	1
	p-value	0.202	0.059	0.570	0.099	0.569	-

cc=correlation coefficient



Table 3 demonstrates the relationship between personality traits and librarians' self-efficacy. There is only a significant and

positive relationship between personality traits of neuroticism and extroversion with librarians' self-efficacy (P-value <0.01).

Table 3. Correlation matrix of NEO personality traits and librarian' self-efficacy

Variable		Creativity	Neuroticism	Extraversion	Openness	Agreeableness	Conscientiousness
Self-efficacy	cc	1					
	p-value	-					
Neuroticism	cc	0.497	1				
	p-value	0.001	-				
Extraversion	cc	0.385	0.317	1			
	p-value	0.012	0.040	-			
Openness	cc	-0.038	0.052	0.403	1		
	p-value	0.811	0.745	0.008	-		
Agreeableness	cc	0.203	0.115	0.463	0.187	1	
	p-value	0.197	0.468	0.002	0.237	-	
Conscientiousness	cc	-0.347	-0.294	0.090	0.258	-0.090	1
	p-value	0.024	0.059	0.570	0.099	0.569	-

cc=correlation coefficient

Discussion

The present study addressed the relationship between personality traits with self-efficacy and the creativity of librarians of Tabriz University of Medical Sciences libraries. The creativity and self-efficacy score of the librarians surveyed is at a medium level. Given the significant relationship between extraversion, openness, and agreeableness of personality traits and creativity of librarians, it can be concluded that librarians' creativity is enhanced by increasing work experiences, as well as by increasing the degree of agreeableness and collaboration with others, which ultimately lead to improving work quality. In this respect, in their research, Karimi et al. indicated that individual and organizational factors such as personal knowledge and reward systems impact their creativity. Their study confirmed that there was a significant relationship between the temperament and the nature of librarians with their creativity, which indicate their results are consistent with the findings of the current study from the perspective of personality traits. The results of their study based on self-efficacy and knowledge dimensions are align with the present study (29). Another study conducted by Solhdoost found that knowledge, communication, and commitment have had a profound impact on librarians' creativity and innovation (30). Ziaei et al. examined the creativity of librarians; accordingly, the results showed that organizational development leads to changes in the attitudes of librarians in organizations and, consequently, their creativity in providing services. The findings of the present study, in line with their research, indicated the importance of individual and personality development of librarians and their creativity (31). Babaei et al. examined the experiences of library managers and indicated that culture and individual and organizational perceptions are factors influencing their creativity. The challenges of library managers were: human

resources, organizational environment, infrastructure, external environment, individual/managerial, strategic, and intellectual/cultural issues, but most of which were human resources and their thinking challenge (32).

The present study indicated a significant and positive relationship between neuroticism, extraversion, personality traits, and self-efficacy of librarians. Paying attention to these components improves librarians' self-efficacy and reinforces their beliefs about their ability to do related affairs and ultimately improve service quality. In this respect, some researchers concluded that there is a direct relationship between job performance and conscientiousness and extraversion (11, 21, 22), as well as between openness and job performance (21). The findings of the present study are also consistent with the cited above. However, in some studies, in contrast to the present study, the relationship between neuroticism and job performance has negatively reported (21, 22). Thus, as Mkoji and Sikalieh have acknowledged, the staff's personality traits can be useful tools in measuring employees' job performance (23). The findings of the present study also indicate the impact of personality dimensions on the performance and the staff's creativity as well.

Some researchers have also reported a positive and significant effect of neuroticism on job satisfaction (16, 17), as well as extraversion (17, 20) and conscientiousness on job satisfaction (20). Since job satisfaction is one of the underlying factors of self-efficacy (17), it can be concluded that the findings of these studies are in line with the results of the present study.

Given that the sample of the present study has consisted of librarians of Tabriz University of Medical Sciences, there is a limitation to generalize the results to other medical universities. In this regard, it is recommended to conduct this type of research in other medical sciences universities.



Conclusion

According to the findings of the study, it is suggested that the librarians' personality dimensions be taken into consideration when starting their work. Besides, based on their specific features of personality dimensions, they should be recruited in various sections of the library, including public services, reference, circulation, and information services, technical services, collection management, cataloging. Also, for the higher productivity and identifying personality traits, librarians working in libraries can be periodically employed in different sections of the library to identify their personality traits objectively and identify the most appropriate section and service for each librarian. Job rotation for the librarians can be an appropriate step in this direction. Identifying personality traits can be done directly using standard questionnaire tools or

indirectly through long-term observation. As a recommendation, managers, and officials take the necessary precautions to identify and enhance librarians' personality dimensions and staff in libraries to minimize conflict and work stress.

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Conflicts of Interests

The authors declare no conflict of interests.

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