

The Relation between Job Satisfaction and Personality Traits among Staff Nurses Working with Elderly People

Mai Sherif Mohamed Osman ⁽¹⁾, Salwa Ahmed Mohamed ⁽²⁾,
Omima Ezzat Mahmoud ⁽³⁾

⁽¹⁾ Master student at faculty of nursing, Beni-Suef University

⁽²⁾ Assist. Professor of Nursing Administration faculty of nursing, Beni-Suef University

⁽³⁾ Assist. Professor of Psychiatric Mental Health Nursing faculty of nursing, Beni-Suef University

Abstract: Job satisfaction, an unquantifiable metric, is defined as a positive emotional response experience when doing job. Personality traits reflect people's characteristic patterns of thoughts, feelings, and behaviors. Aim of study: the study aimed to assess the relation between job satisfaction and personality traits among staff nurses working with elderly people. Subjects and methods: A descriptive design was used to achieve the aim of the current study. The study was conducted in Beni-Suef university hospital and mental health hospital at Beni-Suef governorate. A convenient sample of all nurses 94 nurses (38 nurses in Beni-Suef university hospital and 56 nurses in mental health hospital). Two data collection tool was used to carry out the current study namely; job satisfaction questionnaire sheet, and personality traits questionnaire sheet. Results: 66% of nurses had moderate level of satisfaction. 51.1% of nurses had Low level of psychotism traits. 52.1% of nurses had high level of extraversion traits. 69.1% of nurses had high level of neuroticism traits. Conclusion and recommendations: There is a statistically significant correlation between job satisfaction and personality traits. Periodic assessment for job satisfaction among staff nurses working with elderly people. Periodic assessment for personality traits among staff nurses working with elderly people

Keywords: Elderly people, Job satisfaction, Personality traits, Staff nurses.

1. INTRODUCTION

Elderly people are growing worldwide. As the age advances, there is decline in the physical function and the person becomes susceptible to both the acute and chronic health problems. Elderly people need nursing care which should be provided by a nurse who is knowledgeable, skilled, vigilant, sensitive, proactive, respectful and positively motivated about caring for the older persons. Job satisfaction of nurses and personality traits is crucial for dealing with elderly people (Youssfi Alaoui, et al., 2021).

According to the Ministry of Interior, 11.15% of the population was older than 65 years in 2012, and the aging index was 76.21%. The aging population has been projected to approach 24.8% in 2036. Furthermore, the elderly represents the largest and most active sector of healthcare and medication consumers. Health Insurance report has shown that as much as 89% of the population aged 65 years and over (aged 65+) have one chronic condition. Moreover, more than 56% of all healthcare expenditures are due to chronic conditions (Supriadi, et al., 2020).

With increase in age, the functional capabilities dwindle gradually. From an absolutely independent life, the dependency upon others begins, initially for more complex activities to relatively simpler activities of daily living, until the very basic one's fade. The age at which that happens differs individually considering many factors including mostly physical and mental illnesses. However, it may also differ in different cultures and societies (**Mariño, Giacaman, 2017**).

Personality is the set of mental abilities and frameworks inside the person that are made and moderately continuing and that affect his cooperation with, and adjustments to, the intra psychic, physical and social circumstances. Personality can be defined as a singular's trademark example of thought, emotions, and behavior, together with the psychological components –concealed or not – behind those patterns. The personality of each of us grows through the years and shows a persistent method for managing life challenges (**Halder, et al., 2017**).

Personality plays an important role in one's evaluation of satisfaction towards work. It has been observed that people working in a similarly stressful environment still report varying degrees of job satisfaction. Determining factor of job satisfaction is not only dependent on the nature of job but also on an individual's subjective perception and evaluation. In other words, an individual's personality could directly impact on how he or she interprets the working environment (**Kerr, et al., 2018**).

Research indicates that job can be influenced by several factors that can be divided into two distinct dimensions, namely extrinsic and intrinsic: Extrinsic dimensions' form part of the job situation, are influenced by others and are beyond the employee's control. Examples are factors such as the work itself, pay, promotion opportunities, working conditions, supervision and co-workers. Intrinsic rewards are self-regulated and a direct result of the individual's performance (**Supriadi, et al., 2020**).

Intrinsic rewards satisfy higher-order needs, for example feelings of accomplishment and achievement and the satisfaction of utilizing one's skills and abilities. Intrinsic factors, such as advancement, recognition, responsibility and achievement, appear to be related to job satisfaction. Also, personality traits have great effect on job satisfaction (**Friedman,, Kern, & Reynolds, 2017**).

Job satisfaction of nurses can be defined as an affective or emotional reaction that the nurse has towards a job that is the result of his or her comparison of actual outcomes with expected or deserved outcomes. Job satisfaction has also been defined in terms of attitudes that individuals have towards their jobs. Job satisfaction refers to the individual's perception and evaluation of the job. According to these authors, the individual's perception is influenced by his or her unique circumstances such as needs, values and expectations. Therefore, jobs are evaluated by people on the basis of factors that are important to them. Although the definitions of job satisfaction are varied, it is generally considered to be an attitude or feeling that one has about one's job that is either positive or negative (**Huang, et al., 2020**).

Job satisfaction is one of the most important factors in increasing the employees' performance. It is well established that dissatisfied employees would not perform effectively in the workplace. Job dissatisfaction leads to serious consequences had low job satisfaction, providing health care services for patients and their performance shows the quality of health care, evaluation of their job satisfaction is of importance (**Asbari, et al., 2020**).

A geriatric nurse is a specialist who will help elderly patients recover from illness or injury by providing practical care and developing patient care plans. They may also help with rehabilitation and conduct check-ups in skilled care facilities or hospice facilities. While many specialists in this field administer medication and assist with pain management, they are also trained to focus on preventative care so that their patients are able to avoid injuries and common medical conditions that develop most commonly later in life (**Da Rosa, 2017**).

Significance of the study

In recent years, there has been growing interest in examining the relationship between personality traits and job satisfaction; however, most studies were not conducted in the context of nursing. Personality plays an important role in contributing to one's positive career outcome. Personality has a direct influence on one's job satisfaction. Recently, considerable research attention has focused on a broad personality trait termed core self- evaluations with the investigated criterion on job satisfaction (**Goemans, et al., 2017**).

Job satisfaction and personality traits are closely linked and very important to provide health care for elderly people (**Nahyun and Hana, 2017**). Therefore, this study aims to assess the relation between job satisfaction and personality traits among staff nurses working with elderly people

Aim of the study

The aim of this study is to assess the relation between job satisfaction and personality traits among staff nurses working with elderly people

Research questions:

1. What is the relation between job satisfaction and personality traits among staff nurses working with elderly people?

2. SUBJECTS AND METHODS**Research design:**

Descriptive research design was used in carrying out the current study.

Setting:

The current study was conducted in Beni-Suef university hospital and mental health hospital at Beni-Suef governorate. Beni-Suef university hospital provide multispecialty health services and cover all Beni-Suef citizens. The mental health hospital at Beni-Suef governorate provide different mental psychiatric services for all candidates.

Subjects:

A convenient sample of all nurses 94 nurses (38 nurses in Beni-Suef university hospital and 56 nurses in mental health hospital). Nurses provide direct care for elderly psychiatric patients in the previous mentioned settings.

Data collection tools:

Two data collection tool was used to carry out the current study namely; job satisfaction questionnaire sheet, and personality traits questionnaire sheet.

Tool I job satisfaction questionnaire sheet

This tool consists of two parts:

Part 1: Socio-demographic questionnaire sheet

This tool was developed by the researcher to collect data about nurses' socio-demographic characteristics and includes: age, gender, educational level, years of experience ...etc.

Part 2: Job satisfaction questions:

This part aimed to collect data about job satisfaction of nurses that consists of 52 items under nine main categories namely; pay, promotion, supervision, administration, work environment, job itself, work itself, psychiatric states, and safety at work

Tool II: Eysenck Personality Inventory (EPI):

The Eysenck Personality Inventory (EPI) measures four pervasive, independent dimensions of personality traits, psychoticism, extraversion neuroticism, and lie personality traits.

Tools validity:

Content validity of the study tools was assessed by jury group consisted of five experts (Professors) in nursing from different faculties of nursing (Beni-Suef University & AinShams University). Jury group members judge tools for comprehensiveness, accuracy and clarity in language. Based on their recommendations correction, addition and / or omission of some items were done.

Tools Reliability:

The study tools were tested for its internal consistency by Cronbach's Alpha. It was 0.783 for job satisfaction questionnaire sheet, and 0.856 for personality traits questionnaire sheet.

International Journal of Novel Research in Healthcare and Nursing

Vol. 8, Issue 2, pp: (343-351), Month: May - August 2021, Available at: www.noveltyjournals.com

Pilot study:

Pilot study was carried out on 10% of the total study sample (10 nurses) to evaluate the applicability, efficiency, clarity of tools, assessment of feasibility of field work, beside to detect any possible obstacles that might face the researcher and interfere with data collection. Necessary modifications were done based on the pilot study findings such as (omission of some questions from tool) in order to strengthen their contents or for more simplicity and clarity.

Field work:

Data collection of the study was started at the beginning of June 2020, and completed by the end of April 2021. The researcher attended to previous mentioned settings three days per week from 9am to 2pm for the nurses that worked in previous mentioned settings. The researcher first explained the aim of the study to nurses and reassures them that information collected was treated with confidentiality principals and will be used only for the purpose of the research.

The researcher met with the nursing director of the hospitals to determine the suitable time to collect the data and confirm the days and times to assess job satisfaction, and personality traits for nurses. The study was carried out through an assessment job satisfaction for nurses regarding job satisfaction questionnaire sheet, the questionnaire sheet took from 10:15 minutes. Assessment nurses' personality traits regarding personality traits questionnaire sheet took from 30:45 minutes.

Administrative Design:

An official letter requesting permission to conduct the study was directed from the dean of the faculty of nursing Beni-Suef University to director of previous mentioned settings to obtain their approval to carry out this study. This letter included the aim the study and photocopy from data collection tools in order to get their permission and help for collection of data.

Ethical Considerations:

Prior study conduction, ethical approval was obtained from the scientific research ethical committee of the faculty of nursing, Beni-Suef University. The researcher met director of previous mentioned settings to clarify the aim of the study and take their approval. The researcher also met the staff nurses to explain the purpose of the study and obtain their approval to participate in the study. They were reassured about the anonymity and confidentiality of the collected data, which was used only for the purpose of scientific research. The subjects' right to withdraw from the study at any time was assured.

Statistical analysis:

Data entry and statistical analysis were done using (SPSS) statistical software package. Quality control was at the stage of coding and data entry. Data were presented using descriptive statistics in the form of frequencies and percentage for qualitative variables; mean and standard deviation for quantitative variable. Qualitative categorical variables were compared using Chi-square (X²) test. Pearson correlation co-efficient (r) was used for assessment of the inter-relationship among quantitative variables. Statistical significance was considered at (P-value <0.05).

3. RESULTS

Table 1: shows that 54.3% of nurses' age ranged from 20 :< 30 years. 74.5% of nurses were female, 54.3% of them were married. 61.7% of nurses were lived in urban area. 51.1% of nurses had nursing technical institute. 55.3% of nurses had experience less than 5 years, 61.7% of them not attended training courses about infection control and isolation

Table 2: 66% of nurses had moderate level of satisfaction, 19.1% of them had high level of satisfaction. While, 14.9% of nurses had low level of satisfaction

Table 3: clarifies that 51.1% of nurses had Low level of psychotism traits. While, 48.9 % of nurses had high level of psychotism traits.

Table 4: 52.1% of nurses had high level of extraversion traits. While, 47.9% of nurses had low level of extraversion traits.

Table 5: 69.1% of nurses had high level of neuroticism traits. While, 30.9% of nurses had low level of neuroticism traits

Table 6: shows that, there is a highly statistically significant correlation between extraversion traits and job satisfaction, there is a statistically significant correlation between job satisfaction and psychotism and neuroticism traits.

Table (1) Percentage distribution of the personal characteristics of the studied nurses (n=94).

Personal characteristics	No.	%
1. Age		
- <20 years	0	0
- 20:<30 years	51	54.3
- 30:<40 years	26	27.7
- >40 years	17	18.1
Mean ± SD	31.6 ± 8.4	
2. Gender		
- Male	24	25.5
- Female	70	74.5
3. Marital status		
- Married	51	54.3
- Single	28	29.8
- Widowed	9	9.6
- Divorced	6	6.4
4. Residence		
- Urban	58	61.7
- Rural	36	38.3
5. Education		
- Diploma nurse	24	25.5
- Nursing technical institute	48	51.1
- Bachelor in nursing	15	16.0
- post-graduate studies	7	7.4
6. Past experience		
- < 5 years	52	55.3
- 5-10 years	27	28.7
- >10 years	15	16.0
7. Do you attend training courses about infection control and isolation?		
- Yes	36	38.3
- No	58	61.7

Table (2) Percentage distribution of nurses' total job satisfactory levels (n=94).

	Total Job Satisfaction	
	NO	%
Low satisfaction	14	14.9
Moderate satisfaction	62	66
High satisfaction	18	19.1

Table (3) Percentage distribution of nurses' level of psychotism traits (n=94).

	Nurses' level of psychotism traits	
	NO	%
Low psychotism	48	51.1
High psychotism	46	48.9

Table (4) Percentage distribution of nurses' level of extraversion traits (n=94).

	Nurses' level of extraversion traits	
	NO	%
Low extraversion	45	47.9
High extraversion	49	52.1

Table (5) Percentage distribution of nurses' level of neuroticism traits (n=94).

	Nurses' level of neuroticism traits	
	NO	%
Low neuroticism	29	30.9
High neuroticism	65	69.1

Table (6) Correlation between nurses' personality traits and their job satisfaction.

	Job satisfaction	
	R	P
Psychotism traits	.462	.028*
Extraversion traits	.731	.000**
Neuroticism traits	11.7	.008*

(*) statistically significant $p < 0.05$ (**) highly statistically significant $p < 0.001$

4. DISCUSSION

Job satisfaction is a measure of workers' contentedness with their job, whether they like the job or individual aspects or facets of jobs, such as nature of work or supervision. Job satisfaction can be measured in cognitive (evaluative), affective (or emotional), and behavioral components. Job satisfaction measures vary in the extent to which they measure feelings about the job (affective job satisfaction), Or cognitions about the job (cognitive job satisfaction). Job satisfaction as a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences (**Judge, et al., 2020**).

Personality traits reflect people's characteristic patterns of thoughts, feelings, and behaviors. Personality traits imply consistency and stability—someone who scores high on a specific trait like Extraversion is expected to be sociable in different situations and over time. Thus, trait psychology rests on the idea that people differ from one another in terms of where they stand on a set of basic trait dimensions that persist over time and across situations (**Hong, et al., 2020**). So, the current study aimed to assess the relation between job satisfaction and personality traits among staff nurses working with elderly people.

Regarding demographic characteristics, the current study showed that more than of nurses' age ranged from 20 :< 30 years. Three quarters of nurses were female; more than half of them were married. More than three fifths of nurses were lived in urban area. More than half of nurses had nursing technical institute, and had experience less than 5 years, more than three fifths of them not attended training courses about infection control and isolation

This result is in agreement with **Kong, et al., (2018)** who conducted a study entitled "Job satisfaction research in the field of hospitality" and found that majority of nurses had ages less than 30 years, married and female. Conversely, this result is in disagreement with **Duan-Porter, et al., (2018)** who conducted a study entitled "Depressive symptoms among nurses—Contribution of personality, job characteristics, coping, and burnout" and found that three quarters of nurses were lived in rural areas. More than half of nurses had experiences more than 5 years.

Regarding nurses' total job satisfactory levels, the current study revealed that two thirds of nurses had moderate level of satisfaction, Nearly one quarter of them had high level of satisfaction. From the researcher point of view, this result may be due to nurses in mention hospital setting needed to more satisfaction during work.

This result is in agreement with **Brown, et al., (2018)** who conducted a study entitled "The relationship among change fatigue, resilience, and job satisfaction of hospital staff nurses" and found that more than half of nurses had moderate level of satisfaction. Conversely, this result is in disagreement with **Tran, et al., (2018)** who conducted a study entitled "The impacts of the high-quality workplace relationships on job performance" and found that more than one third of nurses had high level of satisfaction.

Regarding nurses who have psychotism traits, the current study clarified that the highest percentage of nurses who have psychotism traits in the following items: like to be afraid of others, and feel very sad for an animal caught in a trap. More than half of nurses had Low level of psychotism traits. From the researcher point of view, this result may be due to those people were afraid from any things and take more time for thinking.

This result is supported with **Saito, et al., (2018)** who conducted a study entitled "Work values and their association with personality traits among nurses in long-term care hospitals" and found that majority of nurses had more time in thinking. Conversely, this result is in disagreement with **Costello, et al., (2019)** who conducted a study entitled "A systematic review and meta-analysis of the prevalence and associations of personality traits and burnout among staff in long-term care facilities for people" and found that more than half of nurses had high level of psychotism traits.

Regarding nurses who have extraversion traits, the current study clarified that the highest percentage of nurses who have extraversion traits in the following items: usually go out and enjoy himself if you go to a fun party, Can you meet people you didn't know before, like going out a lot, prefer reading more than meeting people, silent in the jungle and are with other people, and easily liven up a boring and bloodthirsty party. More than half of nurses had high level of extraversion traits. From the researcher point of view, this result may be due to those people were like to their life and continue life with normal style.

This result is accordance with **Pérez-Fuentes, et al., (2019)** who conducted a study entitled "Burnout and engagement: Personality traits in nursing professionals" and found that majority of nurses like their life and enjoy with others people. Also, this result is congruence with **Bar, et al., (2018)** who conducted a study entitled "The role of personal resilience and personality traits of healthcare providers on their attitudes towards inter professional collaboration" and found that more than half of nurses had high level of extraversion traits.

Regarding nurses who have neuroticism traits, the current study clarified that the highest percentage of nurses who have neuroticism traits in the following items: worry about great things that might happen, do consider yourself tense or easily agitated, feel pity for himself from time to time, feel upset sometimes, and worry too much about appearance. More than two thirds of nurses had high level of neuroticism traits. From the researcher point of view, this result may be due to those people were stressed and worried rom anything effect on their life.

This result is in agreement with **Konstantinou, et al., (2018)** who conducted a study entitled "Burnout evaluation and personality traits in a Greek cohort of mental health nurses" and found that majority of nurses were worried and stressed in work setting. Conversely, this result is in disagreement with **Molero Jurado, et al., (2018)** who conducted a study entitled "Burnout risk and personality traits in certified nursing staff" and found majority of nurses had high level of neuroticism traits

Regarding correlation between nurses' personality traits and their job satisfaction, the current study showed that, there is a highly statistically significant correlation between extraversion traits and job satisfaction, there is a statistically significant correlation between job satisfaction and psychotism and neuroticism traits.

This result is in agreement with **Oshio, et al., (2018)** who conducted a study entitled "Job satisfaction and Big Five personality traits" and found that there is no statistically significant correlation between job satisfaction and personality traits.

5. CONCLUSION

The current study concluded that more than half of nurses had moderate level of satisfaction. More than half of nurses had Low level of psychotism traits. More than half of nurses had high level of extraversion traits. More than two thirds of nurses had high level of neuroticism traits.

6. RECOMMENDATION

In the light of results of this study, the following recommendations were suggested:

- Periodic assessment for job satisfaction among staff nurses working with elderly people
- Providing sufficient training for staff nurses that working with elderly people.
- Enhance job satisfaction of staff nurses that working with elderly people.
- Increase salary of nurse's staff to improve job satisfaction for them.

REFERENCES

- [1] **Muntinga ME, Hoogendijk EO, van Leeuwen KM, van der Horst HE, Deeg DJH, Frijters DHM, (2017):** Self-perceived met and unmet care needs of frail older adults in primary care. *Arch Gerontol Geriatr*; 58(1):37–42.
- [2] **Supriadi, S., Minarti, S. M. S., Paminto, A. P. A., Hidayati, T. H. T., & Palutturi, S. P. S. (2020).** Factors related to Nurses' Job Satisfaction and Performance at Private Hospitals in Samarinda City, Indonesia. *Journal of Arts and Humanities*, 9(6), 42-52.
- [3] **Mariño R, Giacaman RA. (2017):** Factors related to unmet oral health needs in older adults living in Chile. *Arch Gerontol Geriatr*. 2017; 58(3):454–9.
- [4] **Halder, S., Roy, A., & Chakraborty, P. K. (2017):** The influence of personality traits on information seeking behavior of students. *Malaysian Journal of Library & Information Science*, 15(1), 41-53.
- [5] **Kerr, S. P., Kerr, W. R., & Xu, T. (2018):** Personality traits of entrepreneurs: a review of recent literature. *Foundations and Trends® in Entrepreneurship*, 14(3), 279-356.
- [6] **Friedman, H. S., Kern, M. L., & Reynolds, C. A. (2017).** Personality and health, subjective well-being, and longevity. *Journal of Personality*, 78(1), 179-216. doi: 10.1111/j.1467-6494.2009.00613.x
- [7] **Huang, C. Y., Weng, R. H., Wu, T. C., Hsu, C. T., Hung, C. H., & Tsai, Y. C. (2020).** The impact of person-centred care on job productivity, job satisfaction and organisational commitment among employees in long-term care facilities. *Journal of Clinical Nursing*, 29(15-16), 2967-2978.
- [8] **Asbari, I. B., RudyPramono, A. P., DylmoonHidayat, A., VirzaUtamaAlamsyah, P. S., & MiyvFayzhall, M. (2020).** The Effect of work-Family conflict on Job Satisfaction and Performance: A Study of Indonesian Female Employees. *International Journal of Advanced Science and Technology*, 29(3), 6724-6748.
- [9] **Da Rosa, G. D. (2017).** The relationship between personality, life events and healthy longevity: A comparison of U.S. and Japanese Centenarians. (Unpublished doctoral dissertation). Iowa State University, IA.
- [10] **Goemans, A., Toprak, F., & Vedder, P. (2017):** Which personality traits are related to traditional bullying and cyberbullying? A study with the Big Five, Dark Triad and sadism. *Personality and Individual Differences*, 106, 231-235.
- [11] **Nahyun, K., & Hana, S. (2017):** Personality traits, gender, and information competency among college students. *Malaysian Journal of Library & Information Science*, 16(1), 87-107.
- [12] **Judge, T. A., Zhang, S. C., & Glerum, D. R. (2020).** Job satisfaction. *Essentials of Job Attitudes and Other Workplace Psychological Constructs*, 207-241.
- [13] **Hong, R. Y., Chan, W. Y., & Lim, J. Y. (2020).** Pathological personality traits and the experience of daily situations. *Clinical Psychological Science*, 8(2), 333-342.
- [14] **Kong, H., Jiang, X., Chan, W., & Zhou, X. (2018).** Job satisfaction research in the field of hospitality. *International journal of contemporary hospitality management*.
- [15] **Duan-Porter, W., Hatch, D., Pendergast, J. F., Freude, G., Rose, U., Burr, H., ... & Potter, G. (2018).** Depressive symptoms among nurses—Contribution of personality, job characteristics, coping, and burnout. *Journal of affective disorders*, 234, 67-73.
- [16] **Brown, R., Wey, H., & Foland, K. (2018).** The relationship among change fatigue, resilience, and job satisfaction of hospital staff nurses. *Journal of Nursing Scholarship*, 50(3), 306-313.
- [17] **Tran, K. T., Nguyen, P. V., Dang, T. T., & Ton, T. N. (2018).** The impacts of the high-quality workplace relationships on job performance: a perspective on staff nurses in Vietnam. *Behavioral sciences*, 8(12), 109.
- [18] **Saito, Y., Igarashi, A., Noguchi-Watanabe, M., Takai, Y., & Yamamoto-Mitani, N. (2018).** Work values and their association with personality traits among nurses in long-term care hospitals. *Journal of Nursing Management*, 26(4), 393-402.

International Journal of Novel Research in Healthcare and NursingVol. 8, Issue 2, pp: (343-351), Month: May - August 2021, Available at: www.noveltyjournals.com

- [19] **Costello, H., Walsh, S., Cooper, C., & Livingston, G. (2019).** A systematic review and meta-analysis of the prevalence and associations of personality traits and burnout among staff in long-term care facilities for people. *International Psychogeriatrics*.
- [20] **Pérez-Fuentes, M. D. C., Molero Jurado, M. D. M., Martos Martínez, Á., & Gázquez Linares, J. J. (2019).** Burnout and engagement: Personality traits in nursing professionals. *Journal of clinical medicine*, 8(3), 286.
- [21] **Bar, M. A., Leurer, M. K., Warshawski, S., & Itzhaki, M. (2018).** The role of personal resilience and personality traits of healthcare providers on their attitudes towards interprofessional collaboration. *Nurse education today*, 61, 36-42.
- [22] **Konstantinou, A. K., Bonotis, K., Sokratous, M., Siokas, V., & Dardiotis, E. (2018).** Burnout evaluation and personality traits in a Greek cohort of mental health nurses. *Archives of psychiatric nursing*, 32(3), 449-456.
- [23] **Molero Jurado, M. D. M., Pérez-Fuentes, M. D. C., Gázquez Linares, J. J. G., Simón Márquez, M. D. M., & Martos Martínez, Á. (2018).** Burnout risk and personality traits in certified nursing staff. *International journal of environmental research and public health*, 15(6), 1116.
- [24] **Abbas, E. W., Hadi, S., & Rajiani, I. (2018).** The prospective innovator in public university by scrutinizing particular personality traits. *Polish Journal of Management Studies*, 18.
- [25] **Oshio, A., Taku, K., Hirano, M., & Saeed, G. (2018).** Job satisfaction and Big Five personality traits: A meta-analysis. *Personality and Individual Differences*, 127, 54-60.
- [26] **Youssfi Alaoui, A., Tabii, Y., Oulad Haj Thami, R., Daoudi, M., Berretti, S., & Pala, P. (2021).** Fall Detection of Elderly People Using the Manifold of Positive Semidefinite Matrices. *Journal of Imaging*, 7(7), 109.