ORIGINAL ARTICLE

Effect of Temperament on Happiness and Job Satisfaction in University Employees

TAHEREH KALANTARI[1], MASUMEH BAHMANI[2], SEYED TAGHI HEYDARI[3], *BABAK DANESHFARD[4], ZEINAB NEMATOLLAHI[5], MAJID NIMROUZI[6,]*

ABSTRACT

Background: Happiness and job satisfaction play an important role in quality of life. These two items were hypothesized to have relation with the basic concept of *mizaj*(temperament) in Persian Medicine (PM).
Methods: In this study, happiness, job satisfaction, and temperament were determined using Oxford Happiness Inventory (OHI), Linz job satisfaction questionnaire, and Mojahedi's Mizaj Questionnaire (MMQ) respectively. Their relationship was examined using chi-squared test. P-value<0.05 was considered to be statistically significant.
Results: Data analysis of 199 participants revealed that hot tempered people has higher happiness score (P-value=0.000). In addition, those who were average in terms of wetness/dryness component of their temperament had higher score of happiness (P-value =0.020). As for the job satisfaction, no significant relation was found.
Conclusion: There is a positive relationship between hot temperament and happiness.Temperament as one the basic theories of Persian medicine could be useful in predicting some psychological features of people.
Keywords: Happiness, satisfaction, temperament

INTRODUCTION

Well-being may be known as possessing optimal psychological functioning; however, achieving its true concept seems complex and controversial[1]. Happiness is considered as a subjective wellbeing and is referred to the state of presence of positive emotions and lack of negative emotions, social engagement, and life satisfaction[1,2].

Temperament is considered as one of the most important theoretical basics of Persian Medicine (PM). Definition of temperament in modern and conventional terminology is limited to personality characters[3], while it has had a more general meaning in medieval period. Temperament, in PM approach, is addressed as *mizaj* which means mingling literally.

Galen launched humeral medicine about two thousand years ago. He classified people based on their predominant humor into four groups of sanguine, choleric, phlegmatic, and melancholic. However, he mentioned temperament of the people according to the four qualities of hotness, coldness, wetness, and dryness in the frame of humors which governed a couple of qualities. Each humor possesses an active (hot/cold) and passive (wet/dry) quality. Thence, sanguine, phlegm, bile, and black bile are considered hot-wet, cold-wet, hot-dry and cold-dry respectively[4]. According to PM theories, temperament is evaluated by ten variables including palpation [by examining hotness/coldness and wetness/dryness of skin], physics, hair [considering color, density, and thickness], body color, anthropometrical index, impressiveness to quadruple qualities, quality of body wastes, duration of sleep and wake, as well as mood and affection[5].

Palpation determines the hotness/coldness (active qualities) and wetness/dryness (passive qualities) of the skin. Obesity is a sign of wet temperament and leanness is a sign for dry temperament of the body.

Husky people are usually hot and wet in temperament. Rapid hair growth, dark hair, hair density, dark color skin, big and wide chest cavity, protruded and big joints, and bouncing pulse implicate hot temperament and converse to the aforementioned characteristics implicate cold temperament. Hot-tempered people are more affected by hot weather and hot-nature foods while cold-tempered people are more influenced by cold causes. Urine and stool color are also darker in hot-tempered people. Body excretions are usually tang in hot-tempered compared to cold-tempered people.

Personalized medicine is recently considered as efforts to involve biological, psychological, mental, social and spiritual aspects of human being in tailoring a medicalplan[6]. Using temperament according to PM diagnostic tools may bridge these new strategic plans to modern clinical approach regarding capability of PM modalities in evaluating innate characteristics of human being phenomenologically[7].

Such a concept (i.e., Mizaj) should not be considered as outdated or useless. This powerful toolkit which has been used for individualization in medical practice during past centuries is not far from the current evidence. For instance,molecular evidence at the level of proteomic profile has been provided in recent studies to show the relevance of this basic concept[8,9].

There are many studies on evaluation of subjective well-being; however, different philosophical views, hedonic and eudaimonic approaches to concept of well-being[1], complicate designing a united questionnaire covering both views. The aim of this study was finding the effect

[1]Diagnostic Laboratory Sciences and Technology Research Center, School of Paramedical Sciences, Shiraz University of Medical Sciences, Shiraz, Iran.
[2]Student Research Committee, Shiraz University of Medical Sciences, Shiraz, Iran
[3]Health Policy Research Center, Institute of Health, Shiraz University of Medical Sciences, Shiraz, Iran.
[4]Essence of Parsiyan Wisdom Institute, Phytopharmaceutical Technology and Traditional Medicine Incubator, Shiraz University of Medical Sciences, Shiraz, Iran
[5]Research Center for Traditional Medicine and History of Medicine, Shiraz University of Medical Sciences, Shiraz, Iran
[6]Department of Persian Medicine, School of Medicine, Shiraz University of Medical Sciences, Shiraz, Iran
Correspondence to Dr. Majid Nimrouzi, Email:nimruzim@sums.ac.ir Tel/Fax: (+98)713-2345145,

oftemperament on happiness and job satisfaction amongst employeesof Shiraz University of Medical Sciences.

MATERIALS AND METHODS

In this cross-sectional study, participants were staffs of Shiraz University of Medical Sciences excluding service workers, managers, or faculty members. The study was done on 2016 and all participants signed the informed consent. Data gathering was done using three questionnaires of Oxford Happiness Inventory (OHI), Linz job satisfaction questionnaire, and Mojahedi's Mizaj Questionnaire (MMQ) for temperament evaluation.

OHI comprises 29 questions with a 6-point Likert scalewhich evaluates life satisfaction, self-esteem, subjective well-being, self-satisfaction, and positive mood.It was found to be reliable and valid for Iranians according to the study of Ahmad Alipoor et al (alpha of 0.91)[10].

Job satisfaction questionnaire includes 13 question which proposed by Susan J Linz (11) and it was also valid and reliable for Iranians[12]. Questionnaires were filled by a trained bachelor student based on volunteers' statements.

MMQ is 10-item self-administered mizaj questionnaire, designed and validated by Mojahedi et al[5]. This questionnaire has two parts: its first 8 questions evaluate hotness/coldness (>18= warm, 15-18= moderate in warmness/coldness,<15= cold) whilethe scores of the last 2 questions indicate wetness-dryness (>4= dry, 4= moderate in wetness-dryness,<4= wet). A medical staff was trained for data gathering. He interviewed the university employees whom have been enrolled in the study by cluster sampling.

Statistical analysis: We used SPSS Version 18 for data analysis. One way analysis of variance was done to determine the difference means of happiness and job satisfaction between temperamentitems (i.e., hotness /coldness and wetness/dryness).Chi-squared test was done between temperament items (i.e., hotness /coldness and wetness/dryness) and demographic variables. In addition, P value less than 0.05 was considered to be statistically significant in this study.

Ethical considerations: The aim of the study was explained for the volunteers before their participation. Moreover, the study protocol was approved by the Research Ethics Committee of Shiraz University of Medical Science (IR.SUMS.REC.1395.S247).

RESULTS

A total number of 199 staffs of Shiraz University of Medical Science with mean age of 39.63 yearsand education level of diploma to masters were included in this study. About 60% of the recruited people in the study had the average temperament (regarding hotness/coldness). There was no significant relationship between age and temperament (P value= 0.598). It was the same regarding sex, marital status, and education. Moreover, no significant difference was detected based on the dryness/wetness of the participants (Table 1).

It was also revealed that people with hot temperament had high happiness score comparing to the cold and average tempered persons (P-value=0.000) (Table 2). In addition, those who were average regarding their passive qualities (i.e., dryness/wetness) possess more happiness score comparing to wet or dry-tempered individuals (P-value =0.020) (Table 2).

Table 1. Relationship between temperament and demographic information of the participants.

		Temperament (hotness/coldness)			
		Cold (n=59)	**Average (n=119)**	**Hot(n=22)**	**P-value**
Gender	Male	27(32.9%)	46(56.1%)	9(11.0%)	0.662
	Female	32(27.1%)	73(61.9%)	13(11.0%)	
Marriage status	Single	11(26.8%)	26 (63.4%)	4 (9.8%)	0.818
	Married	48 (30.6%)	91 (58.0%)	18(11.5%)	
Education level	Diploma-Associate Deg.	8 (32.0%)	13 (52.0%)	4 (16.0%)	0.830
	Bachelor	38 (29.9%)	75 (59.1%)	14(11.0%)	
	MA	13 (27.1%)	31 (64.6%)	4 (8.3%)	
		Temperament (dryness/wetness)			
		Dry (n=74)	**Average(n=81)**	**Wet(n=45)**	**P-value**
Gender	Male	29(35.4%)	38(46.3%)	15(18.3%)	0.307
	Female	45(38.1%)	43(36.4%)	30(25.4%)	
Marriage status	Single	14(34.1%)	18 (43.9%)	9 (22.0%)	0.872
	Married	59 (37.6%)	62 (39.5%)	36(22.9%)	
Education level	Diploma-Associate Deg.	8 (32.0%)	12 (48.0%)	5 (20.0%)	0.931
	Bachelor	47 (37.0%)	50 (39.4%)	30(23.6%)	
	MA	19 (39.6%)	19 (39.6%)	10(20.8%)	

Table 2. Relationship between temperament, happiness and job satisfaction in the participants.

	Temperament (hotness/coldness)			
	Cold (Mean±SD)	**Average (Mean±SD)**	**Hot (Mean±SD)**	**P-value**
Job satisfaction	36.16±8.32	37.73±9.45	40.77±10.20	0.135
Happiness	63.96±11.59	63.63±9.21	73.68±14.38	<0.001
	Temperament (dryness/wetness)			
	Dry (Mean±SD)	**Average (Mean±SD)**	**Wet (Mean±SD)**	**P-value**
Job satisfaction	36.50±8.36	39.14±9.71	36.64±9.65	0.151
Happiness	63.22±9.92	67.45±11.56	62.77±10.93	0.020

DISCUSSION

Self-directedness is a positive character that is positively related to positive affect and happiness (13). Garcia et al. in a study on relationship between character and subjective well being showed that self-directedness has a positive effect on life satisfaction(3)and it is in line with results of our study that revealed a relationship between hot temperament and happiness;consideringthe fact that self-directedness is a dominant character of hot-tempered people according to TPM sources[5,14].

People with hot temperament have more energy for physical activity[14] and according to the results of our study, they seems happier in workplace; however, their job satisfaction was not differed statistically with other temperament groups. As Mohammadi et al. found in their study, physical activity plays an important role in happiness[15]. It is in accordance with Avicenna's citation in the "Canon of medicine" that more innate heat and more hotness results in more energy for physical activity[14].

According to Amrai et al., there is a positive relation between spiritual intelligence and extroversion[16]. People with hot-wet temperament are more extrovert compared to cold-dry tempered people according to TPM sources. They are more energetic, have more involvement in social activities, and set a good relationship with others[14,17]. It is in line with the results of our study that showed higher happiness in hot-wet tempered individuals.

Gerdtham et al. found a U-shape relationship between age and happiness: the least happiness is in age range of 45-65 y/o[18]. Jorjani cited that 40-60, middle age, is the period of cold-dry temperament dominancy that is accompanied with diminishing innate heat and energy. Because of this physiological change, middle-age people are more prone to melancholic diseases such as depression[17].

Gelardand Rezaei in a study on employees of tax administration in Tehran showed that more than half of the participants were still satisfied and motivated despite job dissatisfaction[19]. Suzan J. linz in a study on job satisfaction of Russian workers found how workers generally seethe work is more important than other subjective determinants such as age and sex[19].

CONCLUSION

This study showed that people with hot temperament and those who are average in wetness/dryness were happier than other groups; however, their job satisfaction was not different with other groups. Such a correlation should be evaluated in further studies in order to be proved rigorously. After that, happiness could possibly be considered as one of the diagnostic indices of temperament.

REFERENCES

1. Ryan RM, Deci EL. On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. Annual review of psychology. 2001;52(1):141-66.
2. Cloninger CR, Zohar AH. Personality and the perception of health and happiness. Journal of affective disorders. 2011;128(1):24-32.
3. Garcia D, Nima AA, Archer T. International note: Temperament and character's relationship to subjective well-being in Salvadorian adolescents and young adults. Journal of Adolescence. 2013;36(6):1115-9.
4. Nimrouzi M, salehi A, Ahmadi A, Kiani H. Avicenna's medical didactic poems: Urjuzeh Tebbi. AMHA - Acta Medico-Historica Adriatica. 2015.
5. Mojahedi M, Naseri M, Majdzadeh R, Keshavarz M, Ebadini M, Nazem E, et al. Reliability and validity assessment of Mizaj questionnaire: a novel self-report scale in Iranian traditional medicine. Iranian Red Crescent Medical Journal. 2014;16(3).
6. Sanaye R, Daneshfard B. On molecularly personalized medicine clinical trials. Personalized Medicine Universe. 2017;6:40-1.
7. Daneshfard B, Sanaye MR, Nimrouzi M. Prolegomena to a True Integrative Medical Paradigm. Alternative therapies in health and medicine. 2018.
8. Jafari M, Rezadoost H, Karimi M, Mirzaie M, Rezaie-Tavirani M, Khodabandeh M, et al. Proteomics and traditional medicine: new aspect in explanation of temperaments. Complementary Medicine Research. 2014;21(4):250-3.
9. Rezadoost H, Karimi M, Jafari M. Proteomics of hot-wet and cold-dry temperaments proposed in Iranian traditional medicine: a Network-based Study. Scientific reports. 2016;6:30133.
10. Alipour A, Agah Heris M. Reliability and validity of the Oxford Happiness Inventory among Iranians. Journal of Iranian Psychologists. 2007;3(12):287-98.
11. Linz SJ. Job satisfaction among Russian workers. International journal of manpower. 2003;24(6):626-52.
12. Sbati Z. The Survey of Job Satisfaction in Iranian Niopdc Staff. Tehran, ACECR (in Persian); 2005.
13. Garcia D, Moradi S. Adolescents' temperament and character: A longitudinal study on happiness. Journal of Happiness Studies. 2012;13(5):931-46.
14. Avicenna H. Ghanoon Dar Teb [The Canon of Medicine]. 9th ed. Tehran: Soroush Publication; 1978. 413-7 p.
15. Mohammadi E, Batvandi Z, Saberi A. Relationship between happiness and different levels of physical activity. Trends in Sport Sciences. 2015;22(1).
16. Amrai K, Farahani A. Relationship between personality traits and spiritual intelligence among university students. Procedia-Social and Behavioral Sciences. 2011; 15: 609 -12.
17. Jorjani E. zakhire kharazmshahi[in persian]. Tehran: Iranian Medical Academy; 2001.
18. Gerdtham U-G, Johannesson M. The relationship between happiness, health, and socio-economic factors: results based on Swedish microdata. The Journal of Socio-Economics. 2001;30(6):553-7.
19. Gelard P, Rezaei S. The Relationship between Job Motivation, Compensation Satisfaction and Job Satisfaction in Employees of Tax Administration–A Case Study in Tehran. Asian Social Science. 2016;12(2):165.