



Structural model of the role of personality traits on physical health mediated by life expectancy and cognitive functions in older women

Farah Jafari¹

Mohammad Hassan Ghanifar^{1,2*}

Qasem Ahi²

1. PhD student, Department of Psychology, Birjand Branch, Islamic Azad University, Birjand, Iran

2. *Corresponding author: Assistant Professor, Department of Psychology, Birjand Branch, Islamic Azad University, Birjand, Iran

Email: ghanifar@iaubir.ac.ir Received: 16.03.2022 Acceptance: 12.12.2022

Journal of
Applied Family Therapy

eISSN: 2717-2430
http://Aftj.ir

Vol. 3, No. 4, Pp: 524-540
Winter 2023

Original research article

How to Cite This Article:

Jafari, F., Ghanifar, M. H., Ahi, Q. (2023). Structural model of the role of personality traits on physical health mediated by life expectancy and cognitive functions in older women. *afjt*, 3(4): 524-540.



© 2023 by the authors. Licensee Iranian Association of Women's Studies, Tehran, Iran. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution-NonCommercial 4.0 International (CC BY-NC 4.0 license) (<http://creativecommons.org/licenses/by-nc/4.0/>)

Abstract

Aim: The aim of this study was to investigate the role of personality traits on physical health mediated by life expectancy and cognitive functions in elderly women. **Method:** The present study is a descriptive-correlational study and was performed by structural equation modeling. The statistical population included all elderly women who referred to the neighborhoods of Tehran between May and June 2021. The research sample consisted of 384 elderly women referring to neighborhoods in Tehran who were selected by voluntary sampling method. Data were collected using the NEO Five Factor Personality Traits Questionnaire (McCorry and Costa, 1980), the Cognitive Rescue Abilities Questionnaire (2013), the Life Expectancy Questionnaire (Hazarousi, 2006) and the Physical Health Questionnaire (Spence, Helmrich). And Perd, 1987). Data were analyzed using correlation coefficient, Pearson correlation matrix, multiple regression and structural equation modeling. Also, all statistical calculations were performed using Lisrel 8.80 and SPSS.22 software. **Results:** The results showed that standard and non-standard coefficients of the direct path of the hypothetical model from personality traits to cognitive actions ($\beta = 0.48$; $P < 0.01$), personality traits to life expectancy ($B = 0.58$; $P < 0.01$), cognitive functions to physical health ($\beta = 0.20$; $P < 0.01$), life expectancy to physical health ($\beta = 0.30$; $P < 0.01$) has become meaningful. Examination of model fit indices indicates that the model has a good fit with the data. That life expectancy and cognitive functions have had an indirect effect on physical health, so the existence of an indirect relationship between research variables is confirmed with 95% confidence ($P < 0.05$). **Conclusion:** It can be concluded that the model of personality traits fits on physical health through the mediation of life expectancy and cognitive functions in older women.

Keywords: personality traits, physical health, life expectancy, cognitive functions, aging.

References

- Abdi, R., Chalabianlou, G., & Pak, R. (2017). The interactive role of stressful life events, sensitivity to reinforcement and personality traits in predicting the severity of symptoms of multiple sclerosis. *Journal of Fasa University of Medical Sciences*. 7 (1): 44-35.
- Ahdianfar, P., Asranejad Farid, A.A., Losani, F., & Ashuri, A. (2017). The role of metacognitive and metaphysical components in predicting emotional distress in college students, *Iranian Journal of Clinical Psychology*. 23(2): 178-191.
- Amiri, S. (2017). Investigating retrospective and prospective memory and cognitive ability based on the personality dimensions of reinforcement sensitivity theory: behavioral tendency and behavioral inhibition, *Cognitive Psychology Quarterly*. 5 (4): 66-58.
- Ghorbani Bajgirani, Z., Sajjadian, A., & Tamizifar, B. (2019). The relationship between life stress events, personality type, catastrophizing and psychological helplessness with the severity of symptoms in patients with irritable bowel syndrome. *Journal of Psychiatric Nursing*. 7 (3): 62-55.
- Gross JJ. (2012). Emotion regulation: affective, cognitive, and social consequences. *Psychophysiol*; 39 (3): 281 -91.
- Hossein Sabet, F., & Feyzipour, M. (2013). Investigating the relationship between personality dimensions and life expectancy. *Counseling and Psychotherapy Culture Quarterly*. 4 (16): 1-14.
- Javadzadeh Moqtader, A., Salari, A., Shad, B., Hassandokht, T., & Saeed, A. (2018). Depression and anxiety in patients undergoing open heart surgery: age and gender differences. *Afoq Danesh Quarterly*. 24 (3): 231-238.
- Khavari, M., Mokhtari Mosayebi, M., & Haj Alizadeh, K. (2014). The relationship between five personality traits and happiness and hope in students, the second national conference of psychology and behavioral sciences.
- Khodapanah, M., Sohrabi, F., Ahadi, H., & Taghilo, P. (2017). The mediating role of cognitive emotion regulation in the relationship between brain-behavioral systems and eating behaviors in overweight and obese people, *Psychological Health Research Quarterly*. 11 (4): 21-31.
- Leto L, Feola M (2014). A review Cognitive impairment in heart failure patients, *Journal of Geriatric Cardiology*, 11: 316-328.
- Mackenbach, J. P., Hu, Y., & Looman, C. W. N. (2013). Democratization and life expectancy in Europe, 1960–2008. *Social Science & Medicine*, 93, 166- 175.
- Maercker, A., Brewin, C. R., Bryant, R. A., Cloitre, M., Reed, G. M., van Ommeren, M. & Rousseau, C. (2013). Proposals for mental disorders specifically associated with stress in the International Classification of Diseases-11. *The Lancet*, 381(9878), 1683-1685.
- Mueller, C., Thompsell, A., Harwood, D., Bagshaw, P., & Burns, A. (2017). *Mental Health in Older People A Practice Primer*. Available at: <https://www.england.nhs.uk/wp-content/uploads/2017/09/practice-primer.pdf>.
- Nejati, V. (2013). Cognitive Abilities Questionnaire: Designing and Examining Psychometric Features. *Cognitive science news quarterly*. 15 (2): 11-19.
- Pengpid, S., Peltzer, K., Susilowati, I.H. (2019). Cognitive Functioning and Associated Factors in Older Adults: Results from the Indonesian Family Life Survey-5 (IFLS-5) in 2014-2015, *Current Gerontology and Geriatrics Research*, Volume 2019.
- Pourabdol, S., Abbasi, M., Pirani, Z., & Abbasi, M. (2015). The relationship between life expectancy and psychological well-being with quality of life in the elderly. *Psychology of aging*. 1(1): 65-57.

- Rizzuto, D., Mossello, M.D. E., Fratiglioni, M.D., Santoni, G., Wang, H.X., (2017). Personality and Survival in Older Age: The Role of Lifestyle Behaviors and Health Status, *The American Journal of Geriatric Psychiatry*, 25 (12), 1363-1372.
- Seyedabadi, F. (2019). Structural equation modeling of executive functions, depression, treatment compliance and cardiac risk factors in coronary heart patients: investigating the mediating role of personality (age and gender). PhD Thesis, Department of Health Psychology, Islamic Azad University, Karaj Branch.
- Shabani, M. (2016). The role of five personality factors in the quality of life of cardiac patients. *Quarterly journal of psychological studies and educational sciences*. 2(7): 99-108.
- West, R. F., Toplak, M. E., & Stanovich, K. E. (2008). Heuristics and biases as measures of critical thinking: Associations with cognitive ability and thinking dispositions. *Journal of educational psychology*, 100(4), 930.
- Williams, P. G., Suchy, Y., & Kraybill, M. L. (2010). Five-factor model personality traits and executive functioning among older adults. *Journal of Research in Personality*, 44(4), 485-491.
- Wolters, F. J., Segufa, R. A., Darweesh, S. K., Bos, D., Ikram, M. A., Sabayan, B., ... & Sedaghat, S. (2018). Coronary heart disease, heart failure, and the risk of dementia: A systematic review and meta-analysis. *Alzheimer's & dementia: the journal of the Alzheimer's Association*.