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Contact Information

Address:

Psychology Department, Rahman Institute of Higher Education, Ferdousi St, adjacent to Green City Recreational Complex of Ramsar (and Ramsar Cable Car Complex), on the 5th km road to the west of Ramsar, Mazandaran, Iran

Postal Code:

46911-87819

Department Tel:

+981144464846-PBX:122

Department Fax:

+981144464846

Journal Website:
http://modernpsy.rahman.ac.ir/

Email:

modernpsy@rahman.ac.ir
modernpsysupport@rahman.ac.ir
modernpsyrahman@gmail.com
rahman.modernpsy@gmail.com

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Contents

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Journal of Modern Psychology

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Research Paper: Associations between Physical Activity with Self-Esteem and Perceived Motor Competence among Children with Developmental Coordination Disorder

Tayebeh Baniasadi [1], Sedigheh Khajeaflaton Mofrad[2], Forough ShafaeianFard[3]

[1] *Visiting Scholar, Indiana University, School of Public Health, Department of Kinesiology, USA*

[2] *Department of Physical Education, Farhangian University, Gorgan, Iran.*

[3] *MSc Student, Department of Psychology, Bandargaz Branch, Islamic Azad University, Bandargaz, Iran*

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Abstract

Evidence shows that physical activity (PA) is associated with better self-esteem and perceived motor competence in typically developing children. Nonetheless, associations between PA with self-esteem and perceived motor competence among children with developmental coordination disorder (DCD) has received very little attention in the literature. As such, the purpose of this study was to survey the associations between PA with self-esteem and perceived motor competence among children with DCD. A correlational approach was used in this study. Participants were forty-nine children with DCD (mean age of 8.85 years old) from special schools. Physical Activity Questionnaire for Older Children was used for assessing PA. Self-Perception Profile for Children was used to assess self-esteem and perceived motor competence. To analyze data, we used Pearson correlation test and regression analysis. Descriptive results showed that our sample participate in very low amount of PA. In addition, they have low levels of self-esteem and perceived motor competence. Furthermore, PA was significantly and directly associated with both self-esteem and perceived motor competence. Finally, PA has significantly and directly predicted both self-esteem and perceived motor competence. Our findings emphasize on benefits of PA for improving psychological status of children with DCD. Thus, it seems necessary to find out proper strategies and interventions for increase the level of PA in this population.

*** Corresponding author:**
Tayebeh Baniasadi
Address:. *Indiana University, School of Public Health, Department of Kinesiology, USA*
Tel: +98 (911) 222 3333
E-mail: tbaniasa@iu.edu

1. Introduction

Developmental coordination disorder (DCD), also known as developmental motor coordination disorder, developmental dyspraxia or simply dyspraxia, is a lifelong condition that affects learning and executing motor skills and coordination. DCD is not a learning disorder, but it can impact learning. Children with DCD struggle with physical tasks and activities they need to do both in and out of school (Barnett et al. 2019; Cantell et al. 2003; Fogel et al. 2021; Gomez et al. 2017; Tseng et al. 2007). Several studies have demonstrated that children with DCD show poor motor competence in everyday self-care and academic activities such as catching, using scissors, handwriting, riding a bike and participating in sports (Barnett et al. 2019; Cantell et al. 2003; Fogel et al. 2021; Gomez et al. 2017; O'Dea & Connell, 2016; Saban et al. 2014; Tseng et al. 2007). Some studies have also shown that for most individuals with DCD difficulties can persist into adulthood and affect the learning and performance of new motor skills such as driving (Barnhart et al. 2003; Cantell et al. 1994, 2003). Moreover, other line of research has demonstrated that individuals with DCD show low levels of self-esteem, self-confidence, and mental health (Cairney et al. 2005). However, some factors might can positively influence poor physical and psychological components associated with individuals with DCD. An influential factor might be engaging in regular physical activity (PA).

PA refers to any voluntary bodily movement executed by skeletal muscles that requires energy expenditure. Some of physical activities included homework, gardening, sport, walking, etc. (Caspersen et al. 1985; Thivel et al. 2018; Ghorbani et al. 2021). PA leads to numerous physical and mental health benefits in all age categories, including children. Some of these benefits encompass improvement in brain health, helping in weight management, reduction of the risk of disease, strengthening bones and muscles, improving quality of life, and improving ability to do everyday activities (Abdoshahi, Gholami, Naeimikia, 2022; Basterfield et al. 2021; Dana & Christodoulides, 2019; Dana et al. 2021; Hashemi Motlagh, BaniAsadi, Chaharbaghi, & Moradi, 2022; Gholami & Rostami, 2021; Ghorbani et al. 2020, 2021; Lahart et al. 2019; Mohammad Gholinejad, Hojjati, & Ghorbani, 2019; Mohammadi, Nafei, Baniasadi, & Chaharbaghi, 2022; Naeimikia, Izanloo, Gholami, & Ahar, 2018; Naeimikia & Gholami, 2018, 2020; Schwartz et al. 2019; Tremblay et al. 2011; Wafa et al. 2016; Yaali, Naeimi Kia, Gholami, 2018; Zhang et al. 2021). Due to so many benefits of PA, world health organization (WHO) recommends a proper amount of PA for children aged 7 to 18 years old (i.e., at least 60 minutes of moderate-to-vigorous PA across the week) (Bull et al. 2020). Regarding children with DCD, however, it has been shown that they do not follow WHO guidelines (Cermak et al. 2015; Steenbergen et al. 2020). As well, children with DCD demonstrated significantly reduced PA, increased sedentary behavior, poorer fitness and increased overweight compared with typically developing children (Cermak et al. 2015; Steenbergen et al. 2020), which may be due to their physical limitations. It should be noted that lower amount of PA in individuals with DCD can potentially lead to various negative consequences such as enhancing the risk of chronic diseases such

as type 2 diabetes and cardiovascular disease (Kinne et al. 2004; Rimmer et al. 2007).

Furthermore, in healthy children, research has shown that children who participate in regular PA have higher levels of self-esteem and perceived motor competencies (Cantell et al. 2008; Haga, 2009). As mentioned earlier, being DCD results in low self-esteem and other psychological components (Cairney et al. 2005). However, associations between PA and psychological variables have not been investigated in children with DCD. Therefore, the aim of this study was to investigate the associations between PA with self-esteem and perceived motor competence among children with DCD. It was hypothesized that children who PA will positively affect self-esteem and perceived motor competence in children with DCD.

2. Methods

2.1 Participants

This study was conducted based on correlational research method. The sample included 49 children with DCD between 8 to 10 years old (mean 8.85 years old) who attended in special schools. All participants have voluntarily attended in the study. The parents of children gave informed consents. Protocol of this study was in accordance with ethical guidelines of declaration of Helsinki. According to school's office, all children were already diagnosed as DCD. In this study, an experienced examiner assessed the symptoms of DCD in children using the American Psychiatric Association's (2000) *Diagnostic and Statistical Manual of Mental Disorders Text Revision. 4th* ed, too.

2.2 Measures

2.2.1 Physical Activity: Physical Activity Questionnaire for Older Children (PAQ-C) was used for measuring PA of children with DCD. The PAQ-C is a self-administered, 7-day recall instrument. It assesses general levels of PA throughout the elementary school year for students approximately 8 to 14 years of age. The PAQ-C contains nine items, each scored on a 5-point scale (Crocker et al. 1997). Reliability of PAQ-C was measured in this study where Cronbach's alpha coefficient was 0.85.

2.2.2 Self-Esteem and Perceived Motor Competence: In this study, the Self-Perception Profile for Children (Harter, 1985) was used to assess self-esteem and perceived motor competence. This is a commonly used scale with good validity and reliability for use with a child population. It comprises a 36-item self-completed questionnaire measuring perceived competence in five domains (scholastic competence, social acceptance, athletic competence, physical appearance and behavioral conduct) and feelings of global self-worth. Each domain consists of six paired statements. Respondents are asked to select the statement that best describes them and then to say whether it is 'really true' or 'sort of true' for them. In this study, for evaluating self-esteem, we used self-worth was used. As such, for assessing perceived motor competence, we used the part of athletic competence. In this study, reliability of these scales was measured where Cronbach's alpha coefficients were 0.93 and 0.90 for self-esteem and perceived motor competence, respectively.

2.3 Data analysis

To describe research variables, we used mean and standard deviation. Kolmogorov-Smirnov test was used for measuring the normality of data. Pearson correlation test was used to measure the associations between research variables. Finally, regression analysis was used to investigate whether PA predicts self-esteem and perceived motor competence in children with DCD. SPSS software version 26 was used to analyze the data. P-value was set at $P < 0.05$.

3. Results

3.1 Descriptive Results

Mean and standard deviations and relationships between of research variables are shown in Table 1. Descriptive results showed that the level of PA was very low in children with DCD. In addition, children with ASD had low scores in self-esteem and perceived motor competence. Results of Kolmogorov-Smirnov tests showed that our data were normally distributed (all $P>0.05$).

Table 1

Mean, standard deviation and relation between research variables

Variables	*M*	*SD*	1	2	3
1.Physical Activity(	1.01	0.53	-		
2.Self-Esteem	6.82	4.19	0.69***	-	
3. Perceived Motor Competence	7.48	5.22	0.51***	0.74***	-

Results in Table 1 demonstrated that there were significant associations between PA and self-esteem among children with DCD (p=0.000). In addition, PA was significantly associated with perceived motor competence among children with DCD (p=0.000).

3.2 Results of Regression Analysis

Results of regression analysis are presented in Table 2. As observed, PA has directly predicted self-esteem among children with DCD (p=0.000). Also, PA has directly predicted perceived motor competence among children with DCD (p=0.000).

Table 2

The results of multiple regression analysis for predicting self –esteem and perceived motor competence by PA

criterion variable	B	SE	Beta	T	Sig	Tolerance	VIF
Self-esteem			0.582	4.697			
Perceived motor competence			0.493	3.415			
		R=0.508	R^2=0.285	F=8.694	P=≤0.001		
		R=0.465	R^2=0.216	F=6.128	P=≤0.001		

4. Discussion

Previous studies have shown that PA has direct relationship with psychological status (e.g., self-esteem and perceived motor competence) of typically developing children (Cantell et al. 2008; Haga, 2009). However, associations between PA and

psychological status of children in special groups such as DCD have been not surveyed. Thus, the purpose of this study was to investigate the associations between PA with self-esteem and perceived motor competence among children with DCD. It was hypothesized that PA has significant associations with self-esteem and perceived motor competence among children with DCD.

First of all, results of descriptive data showed that the children in this study had very low level of PA, which are in line with the findings of previous studies (Cermak et al. 2015; Steenbergen et al. 2020), indicating that children with DCD engage in very low amount of PA, which may be because of their physical limitations. Furthermore, the level of self-esteem and perceived motor competence were very low in children with DCD in this study, which are consistent with the findings of previous studies (Barnett et al. 2019; Cantell et al. 2003; Fogel et al. 2021; Gomez et al. 2017; O'Dea & Connell, 2016; Saban et al. 2014; Tseng et al. 2007), indicating psychological problems among this population. Psychological problems in individuals with DCD might be a consequence of their physical limitation and barriers. They do not engage in various physical activities which make them distancing from their peers. Most of children with DCD experience loneliness and it is possible that their mental health is negatively affected. According to the results of this study, it seems necessary to adopt appropriate strategies and interventions to enhance the level of PA and mental health among this population.

Additionally, the results of this study revealed that PA was significantly associated with both self-esteem and perceived motor competence among children with DCD. Also, the results of regression analysis showed that higher levels of PA may directly predict higher levels of both self-esteem and perceived motor competence in children with DCD. These results confirm the findings of previous studies on typically developing children (Cantell et al. 2008; Haga, 2009), indicating the positive role played by PA in improving psychological status among children with DCD. As mentioned earlier, children with DCD suffer from poor motor competence. Our findings indicate that if they participate in more PA, it can be resulted in enhancing the perception of their abilities in performing motor skills. In addition, participating in regular PA can be resulted in increasing the level of their self-esteem, which is an important psychological variable in mental health. Thus, Therefore, it can be proposed that children with DCD who participate in regular PA have better mental health compared with those who do not participate in regular PA. The findings of present study also generalize the positive benefits of PA among children with DCD (Abdoshahi, Gholami, Naeimikia, 2022; Basterfield et al. 2021; Dana & Christodoulides, 2019; Dana et al. 2021; Hashemi Motlagh, BaniAsadi, Chaharbaghi, & Moradi, 2022; Gholami & Rostami, 2021; Ghorbani et al. 2020, 2021; Lahart et al. 2019). In early stages of childhood, participating in regular PA provides optimal condition for enhancing motor proficiency in children, especially those in special groups such as DCD (Baniasadi et al. 2019; Chaharbaghi et al. 2022; Mohammad Gholinejad, Hojjati, & Ghorbani, 2019; Mohammadi, Nafei, Baniasadi, & Chaharbaghi, 2022;

Naeimikia, Izanloo, Gholami, & Ahar, 2018; Naeimikia & Gholami, 2018, 2020; Schwartz et al. 2019; Tremblay et al. 2011; Wafa et al. 2016; Yaali, Naeimi Kia, Gholami, 2018; Zhang et al. 2021). As such, it can be proposed that enhancing the level of PA in children with DCD results in better psychological status.

As a limitation to this study, it can be stated that using questionnaire for measuring PA has self-reporting bias (Ghorbani et al. 2021). Thus, future studies should use modern devices for measuring PA for collecting precisive data. Also, we have included only 49 children with DCD in the study, however, it seems a relatively small size. Future studies should use larger sample size for collecting more reliable data.

5. Conclusion

To summarize, the present study adds some new findings into the literature by showing that children who have higher amount of PA have better mental status (e.g., self-esteem and perceived motor competence). Along with the fact that our sample had very low levels of PA and psychological status, it seems that participating in regular PA can act as a proper strategy for diminish the conditions of DCD among this population. Thus, it is essential to find out the ways to increase the level of PA among children with DCD.

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Conflict of interest

The Authors declare that there is no conflict of interest with any organization. Also, this research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

References

Abdoshahi, M., Gholami, A., & Naeimikia, M. (2022). The correlation of autonomy support with intrinsic motivation, anxiety, and intention to do physical activities in children. *International Journal of Pediatrics*, 10(3), 15623-15629. https://dx.doi.org/10.22038/ijp.2022.63021.4810

American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders, Text Revision*. 4th ed. Washington, DC: American Psychiatric Association. https://www.amazon.com/Diagnostic-Statistical-Disorders-Revision-DSM-IV-TR/dp/0890420254

Barnett, A.L., Law, C., & Stuart, N. (2019). *Developmental progression in DCD*. In: Barnett AL, Hill EL, editors. Understanding motor behavior in developmental coordination disorder. London: Routledge; p. 28–51.

Baniasadi, T., Namazi Zadeh, M., Sheikh, M. (2019). The effects of balance training and focus of attention on sway in postural and supra-postural tasks in the elderly

population. *Motor Behavior*, *11*(36), 89-104. https://mbj.ssrc.ac.ir/article_1506.html

Barnhart, R.C., Davenport, M.J., Epps, S.B., & Nordquist, V.M. (2003). Developmental coordination disorder. *Physical Therapy*, *83*, 722-731.

Basterfield, L., Burn, N.L., Galna, B., Karoblyte, G., & Weston, K.L. (2021). The association between physical fitness, sports club participation and body mass index on health-related quality of life in primary school children from a socioeconomically deprived area of England. *Preventive Medicine Reports*, 24, 101557. https://doi.org/10.1016/j.pmedr.2021.101557

Bull, F.C., et al. (2020). World Health Organization 2020 guidelines on physical activity and sedentary behavior. *British Journal of Sports Medicine*, *54*(24), 1451-1462. http://dx.doi.org/10.1136/bjsports-2020-102955

Cairney, J., Hay, J.A., Faught, B.E., Wade, T.J., Corna, L., & Flouris, A. (2005). Developmental coordination disorder, generalized self-efficacy toward physical activity, and participation in organized and free play activities. *The Journal of Pediatrics*, *147*(4), 515-520. https://doi.org/10.1016/j.jpeds.2005.05.013

Cantell, M.H., Smyth, M.M., & Ahonen, T.P. (1994). Clumsiness in adolescence: Educational, motor, and social outcomes of motor delay detected at 5 Years. *Adapted Physical Activity Quarterly*, *11*(2), 115-129. https://doi.org/10.1123/apaq.11.2.115

Cantell, M., Smyth, M.M., & Ahonen, T.P. (2003). Two distinct pathways for developmental coordination disorder: persistence and resolution. *Human Movement Science*, *22*, 413-431. https://doi.org/10.1016/j.humov.2003.09.002

Cantell, M., Crawford, S.G., & Doyle-Baker, P.K. (2008). Physical fitness and health indices in children, adolescents and adults with high or low motor competence. *Human Movement Science*, *27*, 344-362. https://doi.org/10.1016/j.humov.2008.02.007

Caspersen, C. J., Powell, K. E., & Christenson, G. M. (1985). Physical activity, exercise, and physical fitness: Definitions and distinctions for health-related research. *Public Health Reports*, *100*, 126-131. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1424733/

Cermak, S.A., et al. (2015). Participation in physical activity, fitness, and risk for obesity in children with developmental coordination disorder: A cross-cultural study. *Occupational Therapy International*, 22(4), 163-173.

Chaharbaghi, Z., Hosseini, F., Baniasadi, T., Moradi, L., Dana, A. (2022). Impact of physical activity on resilience among teenage girls during the COVID-19 pandemic: a mediation by self-esteem. *Women's Health Bulletin*, 9(2), 80-85. https://dx.doi.org/10.30476/whb.2022.94451.1166

Crocker, P.R.E., Bailey, D.A., Faulkner, R.A., Kowalski, K.C., & McGrath, R. (1997). Measuring general levels of physical activity: Preliminary evidence for the Physical Activity Questionnaire for Older Children. *Medicine & Science in Sports & Exercise*, *29*, 1344-1349. https://doi.org/10.1097/00005768-199710000-00011

Dana, A., & Christodoulides, E. (2019). The effects of a period of selected physical activity on improving manipulative and locomotors skills of children with neuropsychological learning disabilities, *The Journal of Rehabilitation Sciences & Research*, 7, 25-30.

https://doi.org/10.30476/jrsr.2019.81592.1006

Dana, A., Khajehaflaton, S., Salehian, M., & Sarvari, S. (2021). Effects of an intervention in online physical education classes on motivation, intention, and physical activity of adolescents during the COVID-19 pandemic. *International Journal of School Health*, *8*(3), 141-149. https://dx.doi.org/10.30476/intjsh.2021.91103.1145

Fogel, Y., Stuart, N., Joyce, T., & Barnett, A.L. (2021). Relationships between motor skills and executive functions in developmental coordination disorder (DCD): A systematic review. *Scandinavian Journal of Occupational Therapy*, 28, 1-13. https://doi.org/10.1080/11038128.2021.2019306

Gholami, A., & Rostami, S. (2021). Effect of a fun virtual purposeful active play program on children's physical fitness during home quarantine due to the outbreak of Covid-19. *Motor Behavior*, 13(44), 171-190. https://dx.doi.org/10.22089/mbj.2021.10913.1980

Ghorbani S, Afshari M, Eckelt M, Dana A, & Bund A. (2021). Associations between physical activity and mental health in Iranian adolescents during the COVID-19 pandemic: An accelerometer-based study. *Children*, 8(11), 1022. https://doi.org/10.3390/children8111022

Ghorbani, S., Rezaeeshirazi, R., Shakki, M., Noohpisheh, S., & Farzanegi, P. (2020). The role of BMI, physical activity and the use of electronic device in the status of trunk abnormalities in male adolescents. *Journal of Gorgan University of Medical Sciences*, 22(3), 129-136. http://goums.ac.ir/journal/article-1-3676-en.html

Gomez, A., et al. (2017). Numerical abilities of school-age children with developmental coordination disorder (DCD): a behavioral and eye-tracking study. *Human Movement Science*, 55, 315-326. https://doi.org/10.1016/j.humov.2016.08.008

Haga, M. (2009). Physical fitness in children with high motor competence is different from that in children with low motor competence. *Physical Therapy*, *89*(10), 1089-1097. https://doi.org/10.2522/ptj.20090052

Harter, S. (1985). *Manual for the Self-Perception Profile for Children*, Denver: University Press.

Hashemi Motlagh, S., BaniAsadi, T., Chaharbaghi, Z., & Moradi, L. (2022). The effects of socioeconomic status on physical activity in children: Mediating role of motivation. *International Journal of Pediatrics*, *10*(8), 16538-16544. https://dx.doi.org/10.22038/ijp.2022.63421.4834

Kinne, S., Patrick, D. L., & Doyle, D. L. (2004). Prevalence of secondary conditions among people with disabilities. *American Journal of Public Health*, *94*(3), 443-445. https://ajph.aphapublications.org/doi/full/10.2105/AJPH.94.3.443

Lahart I, Darcy P, Gidlow C, & Calogiuri G. (2019). The Effects of Green Exercise on Physical and Mental Wellbeing: A Systematic Review. *International Journal of Environmental Research & Public Health*, *16*(8), 1352. https://doi.org/10.3390/ijerph16081352

Mohammad Gholinejad, P., Hojjati, H., & Ghorbani, S. (2019). The effect of aerobic exercise on body composition and muscle strength of female students at elementary schools of Ali Abad Katoul in 2018. *International Journal of School Health*, 6(4), 27-33. https://dx.doi.org/10.30476/intjsh.2019.45892

Mohammadi, H., Nafei, H., Baniasadi, T., & Chaharbaghi, Z. (2022). Accelerometer-

based physical activity and health-related quality of life in children with ADHD. *International Journal of Pediatrics*, *10*(7), 16362-16369. https://dx.doi.org/10.22038/ijp.2022.63699.4847

Naeimikia, M., Izanloo, Z., Gholami, A., & Ahar, S. (2018). The effect of walking training with cognitive loading on gait indicators related to balance in elderly males. *Journal of Geriatric Nursing*, *4*(3), 43-53. https://jgn.medilam.ac.ir/article-1-255-fa.pdf

Naeimikia, M., & Gholami, A. (2018). Effect of walking training on artificial cobblestone mats on gait spatiotemporal parameters for the elderly women. *Motor Behavior*, *9*(30), 71-86. https://dx.doi.org/10.22089/mbj.2018.3683.1447

Naeimikia, M., & Gholami, A. (2020). Effect of physical activity on the level of perceived mental pressure during home quarantine due to coronavirus outbreak. *Journal of Rehabilitation Medicine*, 9(3), 217-224. http://www.medrehab.sbmu.ac.ir/article_1101156.html?lang=en

O'Dea, A., & Connell, A. (2016). Performance difficulties, activity limitations and participation restrictions of adolescents with developmental coordination disorder (DCD). *British Journal of Occupational Therapy*, *79*, 540-549. https://doi.org/10.1177/0308022616643100

Rimmer, J.H., Rowland, J.L., & Yamaki, K. (2007). Obesity and secondary conditions in adolescents with disabilities: Addressing the needs of an underserved population. *Journal of Adolescent Health*, *41*(3), 224-229. https://doi.org/10.1016/j.jadohealth.2007.05.005

Saban, M.T., Ornoy, A., & Parush, S. (2014). Executive function and attention in young adults with and without developmental coordination disorder-a comparative study. *Research in Developmental Disabilities*, 35, 2644-2650. https://doi.org/10.1016/j.ridd.2014.07.002

Schwartz, J., Rhodes, R., Bredin, S., Oh, P., & Warburton, D. (2019). Effectiveness of approaches to increase physical activity behavior to prevent chronic disease in adults: A brief commentary. *Journal of Clinical Medicine*, *8*(3), 295. https://doi.org/10.3390/jcm8030295

Steenbergen, B., Bekhuis, H. & van Abswoude, F. (2020). Promoting participation in DCD: Physical activity levels and the social network. *Current Developmental Disorders Reports*, 7, 43-47. https://doi.org/10.1007/s40474-020-00193-y

Thivel, D., Tremblay, A., Genin, P.M., Panahi, S., Rivière, D., & Duclos, M. (2018). Physical activity, inactivity, and sedentary behaviors: Definitions and implications in occupational health. *Frontiers in Public Health*, *6*, 288. https://www.frontiersin.org/articles/10.3389/fpubh.2018.00288/full

Tremblay, M.S., et al. (2011). Systematic review of sedentary behavior and health indicators in school-aged children and youth. *International Journal of Behavioral Nutrition & Physical Activity*, 8, 98. https://doi.org/10.1186/1479-5868-8-98

Tseng, M.H., et al. (2007). Cooccurrence of problems in activity level, attention, psychosocial adjustment, reading and writing in children with developmental coordination disorder. *International Journal of Rehabilitation Research*, *30*, 327-332. https://doi.org/10.1097/mrr.0b013e3282f144c7

Wafa, S.W., et al. (2016). Association between physical activity and health-related quality of life in children: a cross-sectional study.

Health & Quality of Life Outcomes, *4*, 71. https://doi.org/10.1186/s12955-016-0474-y

Yaali, R., Naeimi Kia, M., & Gholami, A. (2018). Effect of weight transfer training on static and dynamic balance of older women. *Research in Sport Management & Motor Behavior*, *8(*16), 47-59. https://jrsm.khu.ac.ir/browse.php?a_id=2770&sid=1&slc_lang=en

Zhang, X., et al. (2021). Longitudinal association between physical activity and health-related quality of life among community-dwelling older adults: a longitudinal study of Urban Health Centers Europe (UHCE). *BMC Geriatrics*, *21*(1), 521. https://doi.org/10.1186/s12877-021-02452-y

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Research Paper: Qualitative Study of Biological, Psychological, Social and Spiritual Needs in Chronic Mental Patients

Sara Mokhtari[1]*, Milad SabzehAra Langaroudi[2], Masoume Maleki Pirbazari[2]

[1] *M.A. in General psychology, Rahman Institute of Higher Education.*

[2] *Assistant Professor, Psychology Department, Rahman Institute of Higher Education, Ramsar, Iran.*

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Abstract

The purpose of this research was to qualitatively investigate the biological, psychological, social and spiritual needs of chronic mental patients. This research was conducted using qualitative content analysis. A number of 23 chronic mental patients referred to Tahereh Neuropsychiatric Rehabilitation Center in the city of Ramsar in 2021 were selected through purposive sampling method until theoretical data saturation employing semi-structured interviews. Analysis and coding of the interviews showed four components with 26 sub-components considering all interviews. The biological needs component included 6 sub-components: medical costs, lack of medicine, diet, exercise as well as physical activity, and physical and functional problems. The mental needs component of patients included 7 sub-components: the presence of co-comorbidity, unpleasant emotions, lack of personal and social skills, lack of positive psychological characteristics, low quality of life and psychological exhaustion, as well as having fun and free time. The social needs component of patients included 7 sub-components: need for family support, need for support from relevant organizations, lack of social facilities, social stigma, possibility of education, possibility of employment and need for support from specialists. The component of patients' spiritual needs also included 6 sub-components: the need to have hope, perform religious rituals, lack of meaning and purpose in life, fear of death, loneliness and attitude towards God. The obtained findings reveled that there were different needs in the 4 biological, psychological, social and spiritual dimensions that must be paid attention to in order to improve the mental health and quality of life of chronic mental patients.

*** Corresponding author:**
Sara Mokhtari
Address: Rahman Institute of Higher Education, Ramsar, Iran.
Tel: +98(21)66919384 **E-mail:** sara.mokhtari60@gmail.com

1. Introduction

Chronic mental illness refers to a condition which is accompanied by debilitating and long-lasting psychiatric symptoms and severe functional impairment. People with chronic mental illnesses suffer from symptoms that may interfere with their ability to perform daily activities and participate in work, education, and interpersonal relationships. These individuals often require significant care of family and mental health service centers (Varshney et al., 2021).

The global prevalence of chronic mental illness ranges from 0.4 to 7.7 percent (World Health Organization, 2004). In Iran, according to the director general of the care and rehabilitation office of the country's welfare organization, 7.6 percent, equivalent to 98 thousand and 670 people out of a total of 1 million and 300 thousand people registered in welfare, suffer from chronic mental illness. Moreover, the age of mental illness to provide services is set at 15 to 64 years; however, recently, chronic mental illness is increasing in people under 15 years of age (Taadol newspaper, 2016).

Functional impairment associated with chronic and serious mental illness imposes a heavy burden on individuals and society, and disability often persists even after effective treatment of psychopathological symptoms (Depp et al., 2022). Patients with mental illness admitted to the hospital and stayed there for a long time, see the hospital as their home and are gradually affected by the process of the disease with the reduction of sensory stimulation. In addition, their cognitive performance decreases (Chimara et al., 2022). Long-term use of drugs, including antipsychotics, in patients with mental illnesses can cause periodic or chronic related side effects, and such patients may experience drowsiness, akinesia (a type of movement disorder), dizziness, and physical fatigue (Allison et al., 1999). Additionally, the higher mortality rate, shorter life expectancy and lower standard level of health care for these diseases lead to a lower level of psychological well-being in these patients (Varshney et al., 2021).

Studies have reported higher rates of physical and mental illnesses and negative health outcomes in this group of patients. Compared to the general population, people with chronic mental illness are at higher risk of obesity, cardiovascular disease, type 2 diabetes, and respiratory disease (both genetic and treatment-induced) (De Hert et al., 2011). The lifetime prevalence of substance use disorders in people with chronic mental illness is approximately 50% (Drake et al., 2007). In addition, the occurrence of smoking in these people is 2 to 3 times higher than in people without mental illness (Mazereel et al., 2021).

Chronic mental illness is associated with pro-inflammatory state and maladaptive function of T cells. Childhood problems, chronic stress, and sleep disorders also predispose these individuals to dysregulated immune systems (Mazereel et al., 2021). Chronic mental illness is associated with “accelerated biological aging,” leading to worsening outcomes (Wolkowitz, 2018, p. 144). People with chronic mental illness do not have enough information and skills to deal with the situation properly. For example, during the Covid-19 pandemic, a study found that 72% of people with chronic mental illness did not know enough about its symptoms and 64% of them had insufficient information about the preventive measures that should be taken (Muruganandam et al., 2020).

Seeking help and receiving appropriate treatment in this population is a challenge due to stigma, discrimination, misconceptions, and negative attitudes (Mazereel et al., 2021). Moreover, socioeconomic deprivation, poverty, homelessness, and loneliness can be considered to be the causes of poor outcomes in people with chronic mental illness (Mazereel et al., 2021; Banerjee & Bhattacharya, 2021).

As can be seen, chronic mental patients are faced with problems in different dimensions, and the comprehensive care for them includes the dimensions of their physical, mental, social and spiritual health (Lloyd-Williams et al., 2014). According to the comprehensive biological-psychological-social and spiritual model, it is important to pay attention to the totality of the patient's relationship with these four dimensions for the etiology and treatment of mental disorders. Therefore, a completely comprehensive health care should consider the wholeness of the patient, that is, his/her relationship with the physical, psychological, social and spiritual dimensions (Beng, 2004; Sulmasy, 2002). In this regard, Rego and Nunes (2019) state that in palliative care, it is necessary to adopt a comprehensive model by considering all psychological and social dimensions. Spirituality is often a relevant issue in such situations, although there is a need to distinguish spirituality from religion. Spirituality in palliative care focuses on the psychological and spiritual aspects and helps to relieve the physical, emotional, social and spiritual distress that arise in such situations in the patient, family members and health care professionals. According to their ethical responsibilities, psychologists may include the spiritual needs of their patients in the treatment, because it helps them to identify the values, belief system, spiritual history and distress in the patients. All patients have different needs, some may need spiritual guidance with the cooperation of spiritual care staff, and others may not have needs in this field.

Considering these cases, it can be seen that in order to provide a comprehensive and integrated care approach for patients in general and chronic mental patients in particular, it is important to pay attention to their needs in accordance with the quadrilateral biological-psychological-social and spiritual model. Therefore, the question investigated in the current qualitative research is, what are the biological, psychological, social and spiritual needs of chronic mental patients?

2. Method

This research was done qualitatively and by the method of qualitative content analysis. By purposive sampling until theoretical data saturation, among chronic mental patients referred to Tahereh Neuropsychological Rehabilitation Center in Ramsar in 2021, 23 were selected. In this research, a semi-structured interview was conducted to collect information. Additionally, coding checklist was used for data analysis. In order to increase the reliability of the interview, Creswell's (2009/2014) protocol interview was employed. In coding the data using the content analysis method, the researcher focused on the theme (latent meaning) in the data, which is hidden in different units of analysis (words, sentences, paragraphs, etc.). The researcher carefully read the text of the interview after implementing it. He highlighted each key word and noted the

identified concepts and its repetitions. Repetitive concepts were removed and concepts with semantic sharing were merged (for coding used in content analysis method, see Iman & Noshadi, 2012). Then by naming each category of concepts, (sub)categories or (sub)classes were obtained.

3. Results

The information of the research participants is presented in Table 1.

Table 1

Demographic information of the research participants

Gender	age range	mental disorder	duration of disorder	birth order	Number of children in the patient's family
21 men and 2 women	Minimum 16 and maximum 63 years 5 participants between 20-30 years old 11 participants between 30-40 years old 4 participants between 40-50 years old 2 participants between 50-60 years old 1 participants between 60-70 years old	9 participants with schizophrenia 7 participants with bipolar disorder 3 participants with mental disabilities 2 participants with psychotic depression 1 participants with obsessive-compulsive disorder and depression 1 participants with intellectual disability and autism spectrum disorder	12 participants more than 10 years 8 participants between 5-10 years 3 participants between 2-5 years	7 participants, the first child 4 participants, second child 8 participants, the third child 2 participants, fourth child 1 participants, fifth child 1 participants, seventh child	2 participants, two children 11 participants, three children 7 participants, four children 2 participants, six children 1 participants, eight children

As can be seen, most of the research participants were men (21). Most of them (11 participants) were between 30-40 years old. The most common disorder diagnosed among the participants was schizophrenia, which included 9 participants. In addition, 12 of the participants had chronic mental illness for more than 10 years. The components and sub-components extracted from the interviews with patients are presented in Table 2.

Table 2

Components and subcomponents extracted from interviews with patients

Main components	Subcomponents						
Biological needs	Costs of medical, psychiatric and rehabilitation treatments	Lack of psychiatric drugs	Having a special diet	Physical problems and diseases	Exercise and physical activity	Functional problems (sleeping, feeding, elimination, libido) due to symptoms of the disorder or side effects of psychiatric treatments and medications	
psychological needs	the presence of comorbidity	Experiencing unpleasant emotions due to illness	Lack of personal and social skills,	lack of resilience and positive psychological characteristics	Low quality of life	Fatigue and psychological exhaustion	Having fun and free time
Social needs	Need for family support	The need for support from relevant organizations	Lack of social facilities	Stigma and social discrimination	The possibility of education	The possibility of employment	The need for support from professionals (social workers, psychiatrists, psychologists, etc.)
Spiritual needs	The need to be hopeful	The need to perform religious rituals	Absence and lack of meaning and purpose in life	Thoughts of death	Attitude towards God	loneliness	

As seen in Table 2, 4 components (biological, psychological, social, spiritual needs) were extracted along with 26 sub-components, which are further described.

The component of biological needs

According to the classification of the patients' statements, the component of biological needs included 6 sub-components: costs of medical, psychiatric and rehabilitation treatments, lack of psychiatric drugs, a special diet, exercise, physical activity as well as physical-functional problems (sleeping, nutrition, excretion, libido) all of which due to symptoms of the disorder or side effects of psychiatric treatments and medications.

Costs of medical, psychiatric and rehabilitation treatments

Almost all patients mentioned the high costs of treatments. Participant number 3 said about this, "The cost of obtaining medicine is very high, and the insurance pays a small amount. Especially in recent years, the cost of medicines has increased a lot." Participant number 8 said, "Part of the cost of shock therapy is paid by the welfare organization, but it does not cover all the costs and my family has to pay them themselves."

Lack of psychiatric drugs

Another concern expressed by patients, apart from the high cost of psychiatric drugs, was the shortage of drugs, especially in recent years. Participant number 1 said, "I have to take Risperidone all the time, but a while ago, everywhere I looked for it, nowhere have this drug. Many times, I buy an Iranian one, but it doesn't have the same effect as a foreign one."

Having a special diet

Some patients had to follow a special diet due to certain disorders or taking certain medications. Participant number 4 said, "Alanzapine causes obesity, so I should eat more fruits, vegetables, and fish, but who else can buy these things." Participant number 18 said, "The doctor told me that you should eat foods that contain omega-3, such as fish and sunflower oil. Nuts are also good because they contain magnesium and help to make the manic period lighter."

Physical problems and diseases

Patients were facing problems and physical diseases due to the side effects of drugs or some physical symptoms of disorders. Participant number 6, who was diagnosed with schizophrenia, said, "I always gain weight and my blood sugar is high. That's why I take pills. However, I don't feel like exercising. The doctor told me that you smoke a lot and you should stop it and exercise instead."

Exercise and physical activity

Doing exercise together with losing weight due to the use of psychiatric drugs and improving the quality of life of patients was one of the necessary things that were mentioned by some of them. Participant number 10 said in this regard, "At the clinic, we are given an exercise program that makes me feel better." Participant number 12 said, "I feel much better on days when I go to the park and exercise with my friends."

Functional problems (sleeping, feeding, elimination, libido) due to symptoms of the disorder or side effects of psychiatric treatments and medications

Mental disorder accompanied by medical and psychiatric treatments could lead to problems in different body functions. Participant number 9 said, "I am always constipated. The doctor told me that it is because of the pill that I take. He told me to eat more fruits and vegetables." Participant number 19 said, "I always feel tired. I don't have concentration and appetite... I always have trouble sleeping and I force myself to sleep."

The component of Psychological needs

The psychological needs of patients included 7 sub-components: the presence of comorbidity, unpleasant emotions due to illness, lack of personal and social skills, lack of resilience and positive psychological characteristics, low quality of life and psychological fatigue and exhaustion, as well as having fun and free time.

Presence of comorbidity

Many chronic mental patients had other mental disorders at the same time, which would add to the severity of their condition. Participant number 2, who suffers from bipolar disorder, said, "I take a few pills. The doctor also gives me tranquilizer because I always have anxiety." Participant number 5 said, "I also take methadone. Many times, I have gone to camp to quit my addiction." Participant number 17 said: "The doctor told my family that I have both obsession and depression, but now I'm much better."

Experiencing unpleasant emotions due to illness

Many patients had feelings of shame as well as guilt, anxiety, fear and embarrassment due to mental illness. Participant number 1 said, "I'm too shy to go out. Home is more comfortable." Participant number 10 said, "I always feel bad. I tell myself you are miserable. I have no job, no wife and children."

Lack of personal and social skills

Since these patients had been suffering from the disease for many years and are struggling with its challenges, they were far from learning many personal and social skills. Participant number 6 said, 'My national ID card has not arrived yet. It was lost and I went with my father to get another one." Participant number 7 said, 'I don't have many friends. I only have one friend who owns a supermarket and I go to him."

Lack of resilience and positive psychological characteristics

Mental weakness, lack of necessary mental capabilities to face life challenges and lack of positive mental emotions were among other needs of chronic mental patients. In this regard, participant number 3 said, "I am always nervous. When something small happens, I get nervous." Participant number 11 said, "I'm always pessimistic. I say what kind of life I have. I don't have a job. I don't have fun..."

Low quality of life

Another concern expressed was the quality of life of patients, showing their unpleasant condition. Participant number 4 said: "My days are running out. I don't do anything special. I watch more TV." Participant number 7 said: "There is no happiness left for a person in this situation. Especially I don't sleep properly. Some part of my body always hurts. I don't have any special work or entertainment."

Fatigue and psychological exhaustion

One of the effects of chronic mental illnesses is physical and mental fatigue. Participant number 5 said: "I'm tired. Sometimes, I feel good. Sometimes, I want to die. I have been like this for several years now. Participant number 16 said: "I have been unemployed for a long time. I used to go and work in the office of one of our acquaintances, but I haven't been there for several months now. My unemployment bothers me." Participant number 22 said: "I'm not bored with anything anymore because I often have a pain."

Having fun and free time

Lack of recreational and leisure activities was one of the needs mentioned by many patients. Participant number 1 said: "I really like to go on a trip to Mashhad. We went once a few years ago. However, now it's very difficult under these conditions." Participant number 4 said: "I don't have any special entertainment. I watch more TV."

The component of social needs

The social needs of patients included 7 sub-components: the need for family support, the need for support from relevant organizations, the lack of social facilities, social stigma and discrimination, the possibility of education, the possibility of employment, and the need for support from professionals (social workers, psychiatrists, psychologists, etc.).

Need for family support

Due to the chronic nature of these patients and their dependence on family members, their family would be one of the most important psychological resources and supports for them. Participant number 5

said: "I love my mother. If it wasn't for her, I would have killed myself. She always takes care of me. Participant number 6 said: "I owe a lot to my family. I hurt them many times. But they always like me."

The need for support from relevant organizations

Chronic mental patients more than any other group need support not only from the family, but also from the relevant organizations. Participant number 3 said: "We are covered by insurance, but not supplemental insurance. Medicine costs are very expensive now." Participant number 11 said: "I was hospitalized for a month last year, and welfare organization paid for it, but we paid 900 thousand tomans ourselves."

Lack of social facilities

It is very important to provide social facilities for this group of people with special conditions. Participant number 2 said: "welfare organization wants to give us a loan. Now, it's been a year since we don't have a guarantor." Participant number 8 said: "The center where I was admitted did not have any special facilities for us. Neither camping nor recreational one. We were always on the bed or we were sitting in a corner."

Stigma and social discrimination

One of the most important factors that can affect the mental state of people with chronic mental illnesses was the awareness of the people of the society and the culture that governs the society. The presence of stigma and discrimination against these patients only increases their psychological conditions and psychological pressure on their families. Participant number 3 said about this, "Sometimes, some people tease me. They make fun of me. That's why I don't go out much." Participant number 8 said: "My family's behavior changes when they see me. They always ask how you are. Do you take medicine? Did You Visit Doctor? These words are nerve-racking."

The possibility of education

Providing the opportunity and the possibility of continuing education according to the conditions of these patients was another need expressed by them. Participant number 1 said: "I have a diploma. I really want to go to university, but I mentally no longer have the ability to study." Participant number 4 said: "I was a student. I got sick since the second year of university. I couldn't study anymore, but I really like to continue my studies."

The possibility of employment

Apart from the financial aspect, having a job compatible with the conditions of these patients could enrich their lives and make them get rid of frustration and isolation. Participant number 7 said: "I have been working in the company for two years now. I clean. I get paid. I like my work. I earn money and have fun working."

The need for support from professionals (social workers, psychiatrists, psychologists, etc.)

Understanding the conditions of these patients by the health staff could be effective in improving their mental conditions. Participant number 3 said about this, "We have a female counselor who always talks to me. It helps me a lot. She guides me. The other time, I had a fight with my mother, I talked a lot about it with my counselor." Participant number 15 said: "Doctors do not look at anyone. It was just a doctor who always joked with me. I loved him very much."

The component of spiritual needs

The spiritual needs of patients included 6 sub-components: the need to be hopeful, the need to perform religious rituals, emptiness and lack of meaning and purpose in life, fear of death, loneliness and attitude towards God.

The need to be hopeful

Hope plays an important role in the life of every human being, especially chronic mental patients. These patients, who have been dealing with the disease and its consequences for years, especially need hope in life. Participant number 6 said: "I have been disappointed for some time. The cost of living has gone up. I don't have a proper job." Participant number 15 said, "One lives by hope. Thank God, my family supports me. I am going to work. I feel much better since I went to work. I go out by myself. Sometimes I go for a walk with my friends."

The need to perform religious rituals

For many patients, religious beliefs and religious rituals are the source of comfort. For example, participant number 7 said: "I always go to the mosque. When I pray, I talk to God. I will calm down like this." Participant number 18 said: "I always go to our neighborhood confraternity on Muharram days and mourn. On Muharram, I am always there. I like this very much."

Absence and lack of meaning and purpose in life

Lack of meaning and meaningful activities in life is one of the important factors in reducing people's quality of life. This is also true for mental patients. Having a purpose and meaning could be effective in improving their mental state. Participant number 4 said: "I really like to work. I go to work that I like. I like carpentry very much. I feel much better when I do what I love." Participant number 16 said, "Sometimes, I say that life is not worth it. I feel that everything is absurd and meaningless." Participant number 23 said: "When I think that everyone my age is getting married and are having children, I feel very sad. I still don't have any plans in my life."

Thoughts of death

Fear of death is one of the voids in all human beings. In chronic mental patients, due to their different emotional conditions, these fears and anxieties occur frequently. Participant number 9 said: "Sometimes, I think what will happen if I die. However, I am very afraid. Sometimes I talk about it with my friend, but then my mind gets involved." Participant number 12 said: "Sometimes, I want to kill myself. I wanted to do this once or twice, but then I couldn't. I was a little scared."

Attitude towards God

Suffering from chronic mental illness and its conditions and consequences cause patients to have different views on God. Participant number 1 said about this, "Sometimes, I complain to God why I feel like this. I feel good for a while and bad for a while. I say, God, I'm tired. I can't bear it anymore." Participant number 4 said: "I always trust in God. I want him to help me to improve my condition. I always ask God for help."

Loneliness

The experience of isolation and loneliness is one of the problems faced by mental patients. Participant number 16 said: "I don't have friends and I'm always alone. I only talk to my mother and I often fight with her." Participant number 17 said: "I am not married yet. While my friends and family all got married. It's hard to be alone.

Everyone likes to have a companion." Participant number 22 said: "I have been used to this kind of life for many years. I have one or two friends that I go out with sometimes. Sometimes, people say things that make you angry."

4. Discussion

The present study was conducted with the aim of investigating the biological, psychological, social and spiritual needs of chronic mental patients qualitatively. According to the classification of the patients' statements, the component of biological needs included 6 sub-components - costs of medical, psychiatric and rehabilitation treatments, lack of psychiatric drugs, a special diet, exercise and physical activity, and physical-functional problems. As stated, although the researches considered the needs of chronic neuropsychiatric patients to be very few, the findings were in line with some researches conducted in this field (Malakouti et al., 2003; Di Wei et al., 2016; Tuncer & Duman, 2020). For example, in their research, Malakouti et al. (2003) found that rehabilitation services and treatment follow-up were among the primary needs of chronic mental patients. In the current research, receiving rehabilitation and psychiatric services was one of the sub-components extracted from the interview with the participants. Büssing and Koenig (2010) investigated the spiritual needs of people with chronic diseases in a review study. They revealed that health condition was among the needs listed by these patients. Although conducted on chronic cancer patients, the results of Di Wei et al.'s study (2016) were in line with the present research, it illustrated that adopting a holistic approach (biological, psychological, social and spiritual) taking into account the biological needs of patients led to relief from the physical and mental symptoms of patients with chronic diseases. In a systematic review, Tuncer and Duman (2020) also highlighted that physical health status was among the needs of chronic mental patients.

The psychological needs of the patients included 7 sub-components: the presence of co-occurring mental disorders, the existence of unpleasant emotions due to illness, lack of personal and social skills, lack of resilience and positive psychological characteristics, low quality of life, psychological fatigue as well as exhaustion, and fun and free time. Paterson (1982) in a qualitative study using a semi-structured interview on a chronic mental patient with psychotic disorder stressed that loneliness and lack of choice and decision-making were among the problems that chronic mental patients face in society. As can be seen, loneliness and experiencing unpleasant emotions due to illness was one of the sub-components obtained in this research. Decision-making skills were also among the needs mentioned by the research participants. Lehman (1983) in the study of the needs of mental patients with mental disabilities pointed out the importance of having free time. Grant et al. (2004) in their qualitative research aimed at examining the needs of chronic patients, listed the experience of anxiety, insomnia and despair among their problems. In addition, Tuncer and Duman (2020) reported psychological distress among the needs of chronic mental patients, which is in line with the findings obtained in this research.

The social needs of patients included 7 sub-components - need for family support, need for support from relevant

organizations, lack of social facilities, social stigma and discrimination, possibility of education, possibility of employment and need for support from professionals. In the same context, although Malakouti et al. (2013), Cheraghi et al. (2010) and Sarhadi et al (2014) examined the needs of caregivers and families with chronic mental patients, they demonstrated that disruption in family relationships and their psychological support for patients played a very important role in the condition of chronic mental patients. These findings are in line with the subcomponent of family support that was reported by patients in the current research. In this regard, in their research on the elderly with chronic mental illness, Futeran and Draper (2012) found that one of the most important needs of these patients was to have a close person. Tuncer and Duman (2020) also reported social and close relationships among the needs of chronic mental patients. Hojjati-Abed et al.'s (2010) research on the provision of psychosocial occupational therapy services on the quality of life of patients with chronic mental disorders pinpointed that occupational therapy services (including group therapy, activity therapy and art therapy) improved their life satisfaction, employment, health and strengthened the mental comfort, physical health and overall quality of life, as well as the social relationships and financial status of these patients. Malakouty and Norouzy (1995) illustrated that the follow-up of the mental status of chronic mental patients by follow-up units in hospitals was effective in reducing the number of hospitalizations, increasing cooperation in medication use, and improving their social-occupational performance significantly. Additionally, Grant et al. (2004) showed that when patients were validated and valued by health professionals, they could best use their personal resources and abilities to meet their needs. The findings of these three studies are in line with the sub-component obtained in the present study. In this research, it was also shown that support from professionals (social workers, psychiatrists, psychologists, etc.) in various forms (occupational therapy, music therapy, individual and group counselors, etc.), was included in the social needs expressed by patients. Paterson (1982) with a semi-structured interview on a chronically psychotic patient found that housing situation was one of the challenges expressed by this patient. By evaluating the needs of mentally disabled patients, Lehman (1983) highlighted that social relations, finances, leisure time and health care were important to improve the well-being of these patients. Büssing and Koenig (2010) also showed that social support was especially important for patients with long-term illness. These findings were aligned with the sub-components of lack of social facilities, support from professionals (social workers, psychiatrists, psychologists, etc.) and the possibility of employment that was obtained in this research.

The spiritual needs of patients included 6 sub-components - the need to have hope, the need to perform religious rituals, emptiness and lack of meaning and purpose in life, thoughts of death, loneliness and attitude towards God. Paterson (1982) in a qualitative study using a semi-structured interview on a chronic mental patient (and with psychotic disorder) illustrated that loneliness, lack of choice and lack of meaningful activity were among the problems that chronic mental patients were faced in society. Grant et al. (2004) stressed

that patients' spiritual needs revolved around loss of role and identity and fear of dying. Many of patients sought to make sense of life in relation to an invisible or sacred world. They associated frustration with such matters. Di Wei et al. (2016) also emphasized the role of spiritual issues and existential discomfort in adapting to chronic illness.

This research had some limitations. The research method of the current research was qualitative and therefore it was less objective than quantitative research. Quantitative research tries to accurately measure the research variables and does not interfere with the researcher's beliefs in the evaluation, but the findings obtained in qualitative researches were based on the subjective judgment of the researcher. The tool used in this research was a semi-structured interview, which, unlike quantitative scales and questionnaires, was interpreted based on the subjective judgment of the researcher. In general, it was suggested that by conducting qualitative research and combining it with quantitative methods a more comprehensive understanding of the needs of mental patients could be obtained.

5. Conclusion

The findings of the research showed that chronic mental patients had different needs in the biological, psychological, social and spiritual fields; therefore, paying attention to meeting these needs could be effective in improving their psychological condition.

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Conflict of Interest

The Authors declare that there is no conflict of interest with any organization. Moreover, this research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors

References

Allison, D. B., Mentore, J. L., Heo, M., Chandler, L. P., Cappelleri, J. C., Infante, M. C., & Weiden, P. J. (1999). Antipsychotic-induced weight gain: a comprehensive research synthesis. American journal of Psychiatry, 156(11), 1686-1696. https://doi.org/10.1176/ajp.156.11.1686

Banerjee, D., & Bhattacharya, P. (2021). The hidden vulnerability of homelessness in the COVID-19 pandemic: Perspectives from India. International Journal of Social Psychiatry, 67(1), 3-6. https://doi.org/10.1177/0020764020922890

Beng, K. S. (2004). The last hours and days of life: a biopsychosocial-spiritual model of care. Asia Pacific Family Medicine, 4, 1-3. http://www.apfmj-archive.com/afm4_1/afm_014.pdf

Büssing, A., & Koenig, H. G. (2010). Spiritual needs of patients with chronic diseases. Religions, 1(1), 18-27. https://doi.org/10.3390/rel1010018

Cheraghi, F., Shamsaei, F., & Riazi, H. (2010). Survey of nursing and care needs of patients with mental disorders than of hospital discharge. *Avicenna Journal of Nursing and Midwifery Care*, *18*(2), 15-25. http://nmj.umsha.ac.ir/article-1-1079-en.html

Chimara, M., Van Niekerk, L., & van Biljon, H. M. (2022). Scoping review exploring

vocational rehabilitation interventions for mental health service users with chronic mental illness in low-income to upper-middle-income countries. BMJ open, 12(5), e059211. DOI: 10.1136/bmjopen-2021-059211

Creswell, J. W. (2014). *Research design: quantitative, qualitative and mixed approaches*. (A. Kiamanesh & M Danai Tous, Trans), *Jihad* Danishgahi (Original work published 2009)

Drake, R. E., T Mueser, K. I. M., & Brunette, M. F. (2007). Management of persons with co-occurring severe mental illness and substance use disorder: program implications. World Psychiatry, 6(3), 131. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2174596/

De Hert, M., Correll, C. U., Bobes, J., Cetkovich-Bakmas, M., Cohen, D. A. N., Asai, I., ... & Leucht, S. (2011). Physical illness in patients with severe mental disorders. I. Prevalence, impact of medications and disparities in health care. World psychiatry, 10(1), 52. https://doi.org/10.1002/j.2051-5545.2011.tb00014.x

Depp, C. A., Moore, R. C., Perivoliotis, D., & Granholm, E. (2022). Technology to assess and support self-management in serious mental illness. *Dialogues in clinical neuroscience*., https://doi.org/10.31887/DCNS.2016.18.2/cdepp

Di Wei, X. Y. L., Chen, Y. Y., Zhou, X., & Hu, H. P. (2016). Effectiveness of physical, psychological, social, and spiritual intervention in breast cancer survivors: An integrative review. Asia-Pacific journal of oncology nursing, 3(3), 226. https://doi.org/10.4103/2347-5625.189813

Futeran, S., & Draper, B. M. (2012). An examination of the needs of older patients with chronic mental illness in public mental health services. Aging & mental health, 16(3), 327-334. https://doi.org/10.1080/13607863.2011.628978

Grant, E., Murray, S. A., Kendall, M., Boyd, K., Tilley, S., & Ryan, D. (2004). Spiritual issues and needs: perspectives from patients with advanced cancer and nonmalignant disease. A qualitative study. Palliative & Supportive Care, 2(4), 371-378. https://doi.org/10.1017/S1478951504040490

Hojjati-Abed, E., Karbalaaei-Nouri, A., Rafiei, H., & Karimlou, M. (2010). The efficacy of psychosocial occupational therapy services on quality of life of chronic pschiatric patents. *Archives of Rehabilitation*, *11*(1), 23-28. http://rehabilitationj.uswr.ac.ir/article-1-436-en.html

Iman, M. Taghi., & Noushadi, M. R. (2012). Qualitative content analysis. Research Quarterly, 3, 2, 15-44. http://pajohesh.nashriyat.ir/node/62

Lehman, A. F. (1983). The well-being of chronic mental patients: Assessing their quality of life. Archives of general psychiatry, 40(4), 369-373. https://10.1001/archpsyc.1983.01790040023003

Lloyd-Williams, M., Abba, K., & Crowther, J. (2014). Supportive and palliative care for patients with chronic mental illness including dementia. Current opinion in supportive and palliative care, 8(3), 303-307. https://doi.org/10.1097/spc.0000000000000064

Malakouti, S. K., Nouri, G. A. R., Naghavi, R. M., Ahmadi, A. S., Nasr, E. M., Afgheh, S., & Moghadamnia, M. (2003). The burden of caregivers of chronic mental patients and their needs to care and therapeutic services. Hakim Quarterly, 6, 2, 1-10. file:///C:/Users/NPFEC000916/Downloads/57113820209.pdf

Malakouty, K., & Norouzy, M. (1995). The Role of Follow-up and Mental Health Programmes in Rehabilitation of Chronic Mental Patients. *Iranian Journal of Psychiatry and Clinical Psychology*, *2*(1), 41-47. https://ijpcp.iums.ac.ir/article-1-1672-en.html

Mazereel, V., Van Assche, K., Detraux, J., & De Hert, M. (2021). COVID-19 vaccination for people with severe mental illness: why, what, and how? The Lancet Psychiatry. 8, 5, 444-450. https://doi.org/10.1016/S2215-0366(20)30564-2

Muruganandam, P., Neelamegam, S., Menon, V., Alexander, J., & Chaturvedi, S. K. (2020). COVID-19 and severe mental illness: impact on patients and its relation with their awareness about COVID-19. Psychiatry research, 291, 113265. https://doi.org/10.1016/j.psychres.2020.113265

Peterson, R. (1982). What are the needs of chronic mental patients?. Schizophrenia Bulletin, 8(4), 610. https://doi.org/10.1093/schbul/8.4.610

Rego, F., & Nunes, R. (2019). The interface between psychology and spirituality in palliative care. https://doi.org/10.1177/1359105316664138

Sarhadi, M., Navidian, A., FASIHI, H. T., & Keykhaei, A. (2014). Assessment of psycho-social needs of the family members of the patients hospitalized in ICU and CCU. Jccnursing, 6 (4), 251-260 http://jccnursing.com/article-1-269-en.html

Sulmasy, D. P. (2002). A biopsychosocial-spiritual model for the care of patients at the end of life. The gerontologist, 42(suppl_3), 24-33. https://doi.org/10.1093/geront/42.suppl_3.24

Taadol newspaper. (2016). The prevalence of chronic mental illness reached below 15 years. Retrieved from http://www.taadolnewspaper.ir.

Tuncer, G. Z., & Duman, Z. Ç. (2020). Needs of Individuals with Chronic Mental Disorders: A Systematic Review. Current Approaches in Psychiatry/Psikiyatride Guncel Yaklasimlar, 12(2), 157-167. http://www.cappsy.org/archives/vol12/no2/cap_12_02_01_en.pdf

Varshney, P., Mamtani, H., Kumar, C. N., & Chandra, P. S. (2021). COVID-19 Vaccination for Persons with Severe Mental Illnesses: An Indian Perspective. Journal of Psychological Medicine and Research, 43(5), 436- 441. https://doi.org/10.1177/02537176211033933

WHO World Mental Health Survey Consortium. (2004). Prevalence, severity, and unmet need for treatment of mental disorders in the World Health Organization World Mental Health Surveys. Jama, 291(21), 2581-2590. https://doi.org/10.1001/jama.291.21.25

Wolkowitz, O. M. (2018). Accelerated biological aging in serious mental disorders. World Psychiatry, 17(2), 144. https://doi.org/10.1002/wps.20546

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Research Paper: The Relationship between Spiritual Intelligence with Life Satisfaction and General Health among Female Nurses

Tayebeh Khayatan[1]*, Fatemeh Sargazi[2], Hossein Sadeghi Mollamahaleh[3]

[1] *M. A. in Rehabilitation Counseling, Department of Psychology, University of Social Welfare and Rehabilitation Sciences, Tehran, Iran.*

[2] *M. A. in Psychology, Vice Chancellor for Public Health, Zahedan University of Medical Sciences, Zahedan, Iran.*

[3] *M. A. in Clinical Psychology, 22 Bahman Hospital, Qazvin University of Medical Sciences, Qazvin, Iran*

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Abstract

Spiritual intelligence is one of the types of intelligence that combines the concepts of intelligence and spirituality in a new sense. People with higher spiritual intelligence seem to have a better status in terms of mental health and life satisfaction. The purpose of the present study was to investigate the relationship between spiritual intelligence and life satisfaction as well as general health among female nurses in Kermanshah. In this cross-sectional analytical study, 109 female nurses of Kermanshah hospitals were selected through convenience sampling method. They completed Spiritual intelligence scale (SIS), Satisfaction with Life Scale (SWLS) and General Health Questionnaire (GHQ-28). Data were analyzed using descriptive statistics and Pearson correlation coefficient running SPSS software. The results revealed that there was a positive and significant correlation between the subscale of perception as well as connection to universe of spiritual intelligence and life satisfaction ($p<0.01$) and a negative and significant correlation with general health and its subscales ($p<0.01$). Moreover, there was a positive and significant correlation between the subscale of spiritual life and the reliance on the inner core of spiritual intelligence and life satisfaction ($p<0.01$) and there was a negative and significant correlation with general health and its subscales ($p<0.01$). According to the results, it seemed that nurses with higher spiritual intelligence had higher levels of life satisfaction and were in better health condition. Spirituality training and spiritual intelligence courses can provide a source of support against the stress experienced by nurses.

*** Corresponding author:**
Tayebeh Khayatan
Address: University of Social Welfare and Rehabilitation Sciences, Tehran, Iran
Tel: +98(115)5230512 **E-mail:** t.khayatan@gmail.com

1. Introduction

A little attention was paid to some human needs and dimensions in the past and especially the last century. For example, in the first half of the twentieth century, psychology largely kept itself away from religion. Religion often described as irrational, delusional or as a source of harm, but this image has begun to change in the second part of the twentieth century (Pargament, 2009). In recent years, there has been an increasing trend towards issues such as spirituality and religion. Miller and Thoresen (2003), for example, state that there is evidence that public interest in spirituality is increasing. It is now commonly accepted that whole of person consists of several dimensions: "the physical, social, emotional, intellectual, and spiritual" (Burke et al., 2004, p.58).

Westen (1998 as cited in Miller & Thoresen, 2003) states that spirituality is an important concept that is difficult to define. Although religion and spirituality are often used synonymously and interconnected, there are differences between these two. Religion refers to group aspects and formal methods for expressing one's ideas while spirituality is about individual originality. Religion organizes the spiritual experiences of a group of people within a system of ideas and actions. Religious involvement or religiosity refers to the degree of participation or adherence to the beliefs and practices of an organized religion, while spirituality is a broader conception than religion. Spiritualism (Spirituality) in the first place is a dynamic, personal and experiential process. Spirituality is an intense experience of balance, a sense in which organisms are acting with the greatest possible perfection (Surbone & Baider, 2010). In recent years, a new concept called spiritual intelligence has introduced.

Today, some researchers believe that along with IQ and EQ, there is a third intelligence called spiritual intelligence (SQ). Spiritual intelligence is one of several types of intelligence which can grow relatively independently (Vaughan, 2002). Spiritual intelligence combines the concepts of "spirituality" and "intelligence" in a new sense, and the intelligence that generates the universality causing integrity (Bagheri et al., 2010). Spiritual intelligence implies a capacity for a deep understanding of existential questions and insights into multiple levels of consciousness. Spiritual intelligence also implies knowledge of the soul as the basis of existence or as a creative life force for evolution. Spiritual intelligence can grow with practice and can help a person distinguish reality from illusion (Vaughan, 2002). The concept of spiritual intelligence involves a type of adaptation and problem-solving behavior that includes the highest levels of growth in different areas of cognition, ethics, emotion, interpersonal, and so on; this helps the individual to maintain harmony with the phenomena around him/her and to achieve internal and external integrity. This intelligence gives a person a general view of life and all experiences and events, enabling him or her to reformulate and reinterpret his/her experiences and deepen his/her knowledge and understanding (Ghobari Bonab et al., 2007). Besides, according to Zohar et al. (2000), spiritual intelligence allows humans to be creative, change the rules, and correct situations. Therefore, spiritual intelligence can have benefits for an individual.

Research shows that there is a relationship between the spirituality of

individuals and their physical and mental health. For example, in the research conducted by Bagheri et al. (2010) on 125 nurses in the city of Bushehr, there has been a significant relationship between spiritual intelligence and happiness. Furthermore, in a study on 160 participants in South Korea, there has been a positive and significant correlation between spiritual well-being and life satisfaction (Lee, 2011). In another study, there has been a negative correlation between depression and anxiety and spiritual well-being. Correspondingly, spiritual well-being has been significantly and negatively correlated with fatigue, distress symptoms, memory impairment, as well as lack of appetite, drowsiness, dry mouth, and sadness (Kandasamy et al., 2011).

Nurses face a lot of stress in their daily work environment. For example, in a study in Northern Ireland, nurses are reported to have significant work-related stress (McGrath et al., 2003). This job stress can endanger their physical and mental health. Therefore, it is possible that spiritual intelligence can be helpful for the nurses as a coping strategy. Given that there is no research done on the relationship between spiritual intelligence and life satisfaction in nurses, the first goal of this study is to investigate the relationship between spiritual intelligence and life satisfaction in nurses. There are also very few studies that have examined the relationship between spiritual intelligence and general health dimensions in nurses. Therefore, the second goal of this study is to investigate the relationship between spiritual intelligence and general health and subscales of general health questionnaire such as physical symptoms, anxiety and sleep disturbances, social dysfunction as well as depression symptoms in them.

2. Method

2.1. Study population, sample and research design

This study was an analytical-cross-sectional one. The population of this study was all female nurses in the city of Kermanshah in 2021. Three hospitals were randomly selected among hospitals in Kermanshah. Then, 109 nurses were selected using convenience sampling method, responding to spiritual intelligence scale (SIS), satisfaction with life scale (SWLS) and general health questionnaire (GHQ-28).

2.2. Tools

Spiritual Intelligence Scale (SIS): This scale was standardized by Abdullah Zadeh et al. (2009) on the students. The questionnaire has 29 questions scored in five-options Likert scale, and ultimately two main factors were obtained first of which called perception and connection to universe containing 12 questions and the second factor called spiritual life with reliance on the inner core with 17 questions. The normative sample was 280 participants, 200 of whom were students of Gorgan Natural Resources University and 80 students of Payam Noor University in Buhshehr. Out of which, 184 were female and 96 were male. At first, a preliminary questionnaire of 29 questions was designed by the test constructors and distributed among 30 students. The reliability of the test in the initial phase was 0.84 by the alpha method (Abdullah Zadeh et al., 2009).

Satisfaction With Life Scale (SWLS): This questionnaire, perhaps the most commonly used tool for measuring life satisfaction, was developed by Deiner et al. (1985 as cited in Seyedi Asl et al., 2016). This scale is a short five-item questionnaire scored using Likert scale; each item has seven options that are scored from 1 to 7. In a study on 109 students, the reliability of satisfaction with life scale was 0.83 using Cronbach's alpha and 0.89 with a test-retest method. Likewise, the construct validity of this questionnaire was reported to be appropriate using two questionnaires (Bayani et al., 2007).

General Health Questionnaire (GHQ): This questionnaire was developed by Goldberg (1972 as cited in Abaspour et al., 2014) is the most widely used tool for detecting non-psychotic psychiatric issues. The main advantage of GHQ is that it is easy, short and objective from performer point of view (Khayatan et al., 2022). There are several versions of the GHQ available: There is its 60 items version and shorter ones (containing 30, 28 and 12 items). The 28-items version of this tool (GHQ-28) was developed by Goldberg and Hiller (1979 as cited in Molina et al., 2006). This questionnaire is scored in a four-options Likert method. Finally, a general score and four sub-scales were obtained (Physical symptoms, anxiety and insomnia, social dysfunction and depression). In a study on 80 psychiatric patients and 80 normal individuals, the criterion validity coefficient was 0.78, the split-half reliability coefficient was 0.90 and Cronbach's alpha was 0.97 (Ebrahimi et al., 2007).

2.3.Data analysis

Data were analyzed using descriptive statistics and Pearson correlation coefficient running SPSS software.

3. Results

In the present research, 109 nurses from the city Kermanshah were selected as the participants. The mean age of the group was 32.58 with a standard deviation of 5.10. Besides, the mean working experience of this group was 9.55 with a standard deviation of 5.21. Furthermore, out of sample group, 39 subjects (35.78%) were single and 70 (64.22%) were married.

Pearson correlation analysis was used to investigate the relationship between spiritual intelligence, life satisfaction, general health as well as the subscales of general health questionnaire (Table 1).

Table 1. Results of Pearson correlation analysis

Variable	Spiritual Intelligence	
	Perception and connection to universe	Spiritual life or reliance on the inner core
Life satisfaction	0.266*	0.418**
GHQ Total score	-0.434**	-0.383**
GHQ Physical symptoms	-0.224*	-0.310**
GHQ Anxiety and insomnia	-0.297**	-0.303**
GHQ Social dysfunction	-0.385**	-0.560**
GHQ Depression	-0.541**	-0.386**

P<0.01 ** P<0.05 *

According to Table 1, there was a positive and significant correlation between the first subscale of spiritual intelligence (perception and connection to universe) ($p<0.05$) and the second subscale of spiritual intelligence (spiritual life or reliance on the inner core) ($p<0.01$) and life satisfaction. There was also a negative and significant relationship between the two subscales of spiritual intelligence questionnaire and total score of general health and subscales of general health questionnaire.

4. Discussion

This study was the first study to examine the relationship between spiritual intelligence and life satisfaction. The first finding from this research was that there was a positive and significant relationship between the two subscales of spiritual intelligence and life satisfaction in female nurses in Kermanshah. Naderi and Haghshenas (2009) in a study on elderly found a significant relationship between spiritual intelligence and their life satisfaction. In a study, Brillhart (2005) found that levels of life satisfaction were related to levels of spirituality. In another study it was found that there was a positive correlation between spiritual well-being and life satisfaction (Lee, 2011). Jafari et al. (2010) also concluded that religious and existential well-being significantly predicted life satisfaction. Berman et al. (2004) highlighted that high scores on the intrinsic religiosity scale were strongly associated with high scores on the level of life satisfaction. Chlan et al. (2011) stressed that the use of spiritual and religious coping was significantly associated with the higher life satisfaction. Therefore, the results obtained from this study are consistent with the results of similar studies mentioned. Individuals with a high spiritual intelligence score exceed the limits of the body and matter, experiencing the peak of consciousness and using spiritual sources to solve problems; moreover, features such as humility, compassion, mercy and forgiveness can be found in them. With these features and a positive view of this world, these people were happy with their lives and try to improve it (Naderi & Haghshenas, 2009).

Another finding of this study was that both subscales of spiritual intelligence had a negative and significant correlation with the total score of general health questionnaire as well as all four subscales of it including physical symptoms, anxiety and insomnia, social dysfunction as well as depression. This finding is also confirmed in other research on spiritual intelligence and general health (Akbari Zadeh et al., 2011; Moalemi et al., 2009). In another study, a negative correlation was found between depression and spiritual well-being (Lee, 2011). Ghobari Bonab et al. (2010) demonstrated a negative and significant relationship between the five subscales of spirituality and mental health; they also found a positive and significant relationship between the subscales of negative experiences of spirituality and mental health. It can be said that people with higher spiritual intelligence in stressful situations can react more effectively using stress coping strategies. Spiritual intelligence also implies the ability to utilize spiritual resources and capacities to increase adaptability and, consequently, mental health (Hayman & Lashani, 2011).

5. Conclusion

Finally, it can be concluded that spiritual intelligence plays an important role in feeling satisfied with life and promoting general health of nurses who suffer from sever work stress and can be helpful to them as a coping strategy. As Vaughan (2002) said, this intelligence can grow, so interventions and training programs can be designed for nurses to strengthen this type of intelligence, to take steps to maintain and improve their health and to make them satisfied with their lives.

This research had limitations. The sample group was limited to female nurses in Kermanshah. Therefore, it is suggested that the same analysis should be considered for male nurses, as well. The number of research samples was also low, so it would be better to use more participants in future research. In addition, due to the type of research, it was not possible to deduce the causal relationship. Researchers suggest that other research be done to determine the exact effect of spiritual intelligence on life satisfaction and general health.

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Conflict of Interest

The Authors declare that there is no conflict of interest with any organization. Also, this research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

References

Abaspour, P., Ahmadi, S., Ahmadi, S. M., & Asl, S. T. S. (2014). The Role of Attachment Styles and Perfectionism in Predicting of Students' Mental Health. *Journal of Clinical Research in Paramedical Sciences*, 3(3), e82117. https://brieflands.com/articles/jcrps-82117.html

Abdollahzadeh, H., Kashmiri, M., & Arab Ameri, F. (2009). Construction and Standardization of spiritual intelligence questionnaires. Tehran: Ravansanji.Akbari Zadeh, F., Bagheri, F., Hatami, H. R., & Hajivandi, A. (2011). Relationship between spiritual intelligence, hardness and general health among nurses. *Journal of Kermanshah University of Medical Sciences, 15*(6), 466-472. https://brieflands.com/articles/jkums-78899.html

Bagheri, F., Akbarizadeh, F., & Hatami, H. (2010). The relationship between nurses' spiritual intelligence and happiness in Iran. *Procedia-Social and Behavioral Sciences, 5*, 1556-1561. https://doi.org/10.1016/j.sbspro.2010.07.325

Bayani, A. A., Mohammad, K. A., & Goodarzi, H. (2007). Reliability and validity of life satisfaction scale (SWLS). *Iranian Journal of Psychology, 3*(11), 259-265. https://jip.stb.iau.ir/article_512406.html?lang=en

Berman, E., Merz, J. F., Rudnick, M., Snyder, R. W., Rogers, K. K., Lee, J., . . . Wolpe, P. R. (2004). Religiosity in a hemodialysis population and its relationship to satisfaction with medical care, satisfaction with life, and adherence. *American Journal of Kidney Diseases, 44*(3), 488-497. https://pubmed.ncbi.nlm.nih.gov/15332222/

Brillhart, B. (2005). A study of spirituality and life satisfaction among persons with spinal cord injury. *Rehabilitation Nursing, 30*(1), 31-34. https://doi.org/10.1002/j.2048-7940.2005.tb00353.x

Burke, M. T., Chauvin, J. C., & Miranti, J. G. (2004). *Religious and spiritual issues in counseling: Applications across diverse populations*: Routledge.

Chlan, K., Zebracki, K., & Vogel, L. (2011). Spirituality and life satisfaction in adults with pediatric-onset spinal cord injury. *Spinal Cord, 49*(3), 371. https://doi.org/10.1038/sc.2010.80

Ebrahimi, A. E., Moulavi, H., Mousavi, S. G., Bornamanesh, A., & Yaghoubi, M. (2007). Psychometric Properties And Factor Structure Of General Health Questionnaire 28 (Ghq-28) In Iranian Psychiatric Patients. *Journal of Research in Behavioral Sciences, 5*(1), 5-12. http://dorl.net/dor/20.1001.1.17352029.1386.5.1.3.2

Ghobari Bonab, B., Salimi, M., Suliani, L., & Nouri Samedan, S. (2007). Spiritual Intelligence. *Quarterly journal of religious thought, 3*(10), 125-147. https://www.sid.ir/paper/133569/en

Ghobary Bonab, B. (2010). Relation between mental health and spirituality in Tehran University student. *Procedia-Social and Behavioral Sciences, 5*, 887-891. https://doi.org/10.1016/j.sbspro.2010.07.204

Hayman, S., & Lashani, L. (2011). The Relationship of Spiritual Intelligence with Stress Coping Strategies. *Rehabilitation Nursing, 5*, 75-81. https://rehabilitationj.uswr.ac.ir/article-1-1028-en.html

Hultell, D., & Gustavsson, J. P. (2008). A psychometric evaluation of the Satisfaction with Life Scale in a Swedish nationwide sample of university students. *Personality and Individual Differences, 44*(5), 1070-1079. https://doi.org/10.1016/j.paid.2007.10.030

Jafari, E., Najafi, M., Sohrabi, F., Dehshiri, G. R., Soleymani, E., & Heshmati, R. (2010). Life satisfaction, spirituality well-being and hope in cancer patients. *Procedia-Social and Behavioral Sciences, 5*, 1362-1366. https://doi.org/10.1016/j.sbspro.2010.07.288

Kandasamy, A., Chaturvedi, S., & Desai, G. (2011). Spirituality, distress, depression, anxiety, and quality of life in patients with advanced cancer. *Indian journal of cancer, 48*(1), 55.

Khayatan, T., SeyediAsl, S., Nazari Anamagh, A., Sadeghi Mollamahaleh, H., Minaee, H., & Nazari Anamagh, A. (2022). Comparison of Mental Health in Students with Problematic Use of Mobile Phones and Normal Students. *Journal of Modern Psychology, 1*(4), 22-29. https://doi.org/10.22034/jmp.2022.333922.1033

Lee, S. (2011). Life satisfaction, depression and spirituality for Korean elderly people. *European Psychiatry, 26*, 839. https://doi.org/10.1016/S0924-9338(11)72544-5

McGrath, A., Reid, N., & Boore, J. (2003). Occupational stress in nursing. *International journal of nursing studies, 40*(5), 555-565. https://doi.org/10.1016/S0020-7489(03)00058-0

Miller, W. R., & Thoresen, C. E. (2003). Spirituality, religion, and health: An emerging research field. *American psychologist, 58*(1), 24. https://doi.org/10.1037/0003-066X.58.1.24

Moalemi, S., Bonyani, N. M., & Raghibi, M. (2009). Investigating the relationship between mental health, spiritual intelligence and ineffective thoughts in students of Sistan and Baluchestan University. *Principles of Mental Health, 12*(4), 702-

709. https://doi.org/10.22038/jfmh.2010.1033

Molina, J., Andrade-Rosa, C., González-Parra, S., Blasco-Fontecilla, H., Real, M., & Pintor, C. (2006). The factor structure of the General Health Questionnaire (GHQ): a scaled version for general practice in Spain. *European Psychiatry*, *21*(7), 478-486. https://doi.org/10.1016/j.eurpsy.2006.03.002

Naderi, F., & Haghshenas, F. (2009). The relationship between impulsiveness and loneliness with the rate of student use of mobile phones. *New findings in psychology*, *4*(12), 111-121.

Pargament, K. (2009). *Spirituality. In: Lopez SJ, editor. The encyclopedia of positive psychology* (1 ed.). West Sussex: Blackwell Publishing Ltd.

Seyedi Asl, S. T. S., Sadeghi, K., Bakhtiari, M., Ahmadi, S. M., Anamagh, A. N., & Khayatan, T. (2016). Effect of group positive psychotherapy on improvement of life satisfaction and the quality of life in infertile woman. *International journal of fertility & sterility*, *10*(1), 105. https://doi.org/10.22074/ijfs.2016.4775

Surbone, A., & Baider, L. (2010). The spiritual dimension of cancer care. *Critical reviews in oncology/hematology*, *73*(3), 228-235. https://doi.org/10.1016/j.critrevonc.2009.03.011

Vaughan, F. (2002). What is spiritual intelligence? *Journal of humanistic psychology*, *42*(2), 16-33. https://doi.org/10.1177/0022167802422003

Zohar, D., Marshall, I., & Marshall, I. N. (2000). *SQ: Connecting with our spiritual intelligence*: Bloomsbury Publishing USA.

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Research Paper: Comparison of Self-destructiveness, Fear of Performance Failure, and the Big Five Personality Traits in Adolescent Boys with Divorced and Normal Families

Ashraf Sadat Mousavi [1], Masoume Jafari-nejad[2]

[1] *Assistant Professor, Psychology Department, Hazrat-e Masoume University, Qom, Iran*
[2] *M. A. in Personality Psychology, Islamic Azad University e-Campus*

Citation: Sadat Mousavi, A., Jafari-nejad, M. (2022). Comparison of Self-destructiveness, Fear of Performance Failure, and the Big Five Personality Traits in Adolescent Boys with Divorced and Normal Families. *Journal of Modern Psychology*, 2(2),33-48. https://doi.org/ 10.22034/jmp.2023.388962.1052

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Abstract

The aim of the present study was to compare self-destructiveness, fear of failure, and the big five personality traits in adolescent boys in divorced and normal families, employing a causal-comparative method. Ninety boys (of divorced and normal families, 45 in each group) were selected through purposeful sampling method for teenagers from divorced families and random sampling for teenagers from normal families. All of which were 15 to18 year-old boys studying in the second grade of high school in Karaj. To collect the data, Chronic self-destructiveness Scale (CSDS), Performance Failure Appraisal Inventory (PFAI) and NEO Five Factor Inventory (NEO-FFI) were run, and Multivariate analysis of variance test was used for analysis of data. Results showed that chronic self-destructiveness ($F=94/64$, $p \leq .001$), inconsideration and lack of commitment ($F=28/818$, $p \leq .001$), neglect ($F=160/60$, $p \leq .001$), risk taking ($F=43/543$, $p \leq .001$), stupefaction ($F=52/933$, $p \leq .001$), fear of failure ($F=1238/00$, $p \leq .001$), fear of experiencing shame and embarrassment ($F= 1035 / 45$, $p \leq .001$), fear of devaluing one's self-esteem ($F = 1600 / 64$, $p \leq .001$), fear of having an uncertain future ($F = 1507 / 61$, $p \leq .001$)), fear of losing interest from important others ($F= 69 / 872$, $p \leq .001$) and neuroticism ($F = 94 / 2202$, $p \leq .001$) were higher in adolescent boys with divorced families than normal ones. In other dimensions of the big five, extraversion ($F= 1719 / 52$, $p \leq .001$), openness to experience ($F = 47 / 12$, $p \leq .001$), agreeableness ($F = 3032 / 96$, $p \leq .001$), and conscientiousness ($F= 1788 / 59$, $p \leq .001$), the mean scores in adolescent boys with normal families were higher than the ones from divorced. The negative experiences, the absence of a caring parent, and the lack of a sense of security in divorced families can be the reasons behind the higher rate of self-destructiveness and fear of success in adolescents from divorced families.

*** Corresponding author:**
Ashraf Sadat Mousavi
Address: Psychology Department, Hazrat-e Masoume University, Qom, Iran
Tel: +98 (991) 2013615
E-mail: ashraf.mousavi@gmail.com

1. Introduction

Family is a safe place to satisfy various physical, intellectual and emotional needs. Therefore, it is very important to be aware of biological and psychological needs of children and to know how to satisfy them. It is usual that various individual, social, emotional and psychological factors, as well as stability, and coherence weakens this long-lived and constructive institution (Amato & Mariot, 2017). Among these factors is divorce. In addition to the effects that divorce has on couples, it has many negative effects on children and their psychological health, which can lead to many short-term and long-term psychological problems for the children of these families (Amato & Marriot, 2017). Anxiety, stress, mental and physical problems are among the negative effects of divorce on the children of these families (Schimmenti & Bifulco, 2015). Moreover, creating emotional problems, children's social relationship problems, moral problems and even problems in children's academic performance are important which are factors resulting from parental separation, because with the separation of parents, high stress and tension is created among all family members, especially in children (Berry et al., 2010).

Considering the fact that adolescence is a sensitive period which is educationally difficult and challenging, the separation of parents can create many behavioral problems for adolescents by creating double stress, doubly increasing the behavioral and mood tensions of this period (Sharifi Daramadi, 2007). The conditions governing divorced families can create discrepancies between teenagers in these families and teenagers in normal families. According to studies, it can be predicted that the children in high tension or divorced families have more behavioral and psychological problems than those of normal families (Fletcher & Bonell, 2008; Gauffin et al., 2013). Changes in mood, economic problems, withdrawal as well as isolation, unwillingness to establish a relationship and tendency to introversion, inability to reasoning and to be logical in a stressful situation, in high tension and anxiety, to have intolerance of indecisiveness, inappropriate emotional responses, weakness in self-expression, problems in adapting to stressful situations, high feeling of guilt and intolerance in failure, self-suppression and self-destructiveness, as well as delinquent behavior and mental problems such as depression and anxiety are the other problems in teenagers caused by the divorce of parents (Storksen, 2006; Thompson et al., 2017; Yaghobi et al., 2011; Das, 2010; Motataianu, 2015). According to the background of the research on the difference between teenagers in divorced and normal families with regard to some psychological characteristics, the present research was conducted aiming at investigating the difference between two groups of teenagers from divorced and normal families considering three variables: self-destructiveness, fear of failure and the big five personality traits. In the definition of self-destructiveness, it can be stated that the tendency to perform behaviors that increase the probability of gaining negative experience and decrease the probability of achieving their success is called self-destructiveness (Kelley et al., 1985) which is in harmony with the definition of self-failure

personality proposed in the definition of the third revised edition of the *Diagnostic and Statistical Manual of Mental Disorders*. In fact, it can be said that failure-seeking patterns are a durable set of inflexible and inclusive behaviors leading to long-term negative consequences in people (Baumeister & Scher, 1988). The possibility of self-destructiveness in teenagers increases in families in which the needs of teenagers are not satisfied and the atmosphere in the family is unstable and tense (Lindström & Rosvall, 2019; Brand et al., 2019; Molepo et al., 2012; Shirzad, 2019).

Three models have been proposed for self-destructiveness (Leith & Baumeister, 1996): a) Intentional or primary self-destructiveness model: In the most incomprehensible type of self-destructiveness, a person wishes to harm himself or herself and, in this regard, chooses activities that predictably lead to such results. The tendency to self-destructiveness clearly indicates a negative attitude towards oneself. Low self-value goes beyond a mere lack of confidence in an activity and includes intense self-loathing. It is also possible that the intensity of negative attitude towards oneself is facilitated by negative and strong emotional states. In this case, intense guilt, regret and maybe even anxiety create a very negative self-evaluation, ultimately leading to self-destructiveness. This model is not observed in healthy people. b) Balanced model: the second model of self-destructiveness requires choosing behaviors that harm oneself at the cost of certain benefits of that choice. Therefore, this cost (self-harm) is predictable, but there is no desire for it, and harm or danger is accepted as a necessary accompaniment to achieving other goals. This model refers to a situational structure that requires two competing, but unrelated goals. Normally, in this model, a person faces a situation in which there is a mismatch between two desirable goals, in such a way that pursuing one reduces the person's chance to achieve the other. Many situations in the balanced model require an immediate goal and a long-term goal, and thus it is possible for a person to make a poor choice by focusing on immediate and short-term outcomes. Urgency creates a remarkable perspective, and so the short-term benefits are quite obvious to people; however, the long-term goals seem distant. Therefore, factors that increase short-term focus increase the frequency of self-destructive responses in this model. Emotional states are by nature transient and short-lived, and therefore people are more likely to make a decision that places too much importance on short-term and immediate outcomes. Especially negative emotional states and the desire to end them should quickly be taken into consideration. In the case of positive emotions, a person's tendency to prolong them and make them permanent can increase wrong decisions. c) The model of strategies with opposite results: the third category includes a type of self-destructiveness in which a person does not wish for or predict harm to himself/herself. In this category, a person actively pursues goals, but systematically finds inconsistent or ineffective methods to achieve that goal. Therefore, this category can be considered unintentional self-destructiveness. Apparently, the person has logical and consistent reactions to achieve his goals, and

it is only at the end that it becomes clear the reactions had a counterproductive result. The chosen strategy may fail for two reasons: either the person is not able to implement it, or the strategy (even if it is implemented properly) does not lead to the desired result.

In addition to self-destructiveness, it seems that teenagers from divorced and normal families also differ in fear of failure. For defining this variable, it can be said that fear of failure is a negative and threatening evaluation, a feeling of anxiety in situations in which there is a possibility of failure. Failure is considered to be threatening for people who have learned to associate it with disappointing results (Maghsoodlo et al., 2016). Among the factors that lead to the fear of failure are experiencing shame and embarrassment, having an uncertain future, losing important people and their interest, and having negative self-evaluation (feeling of worthlessness) (Conroy et al., 2010). Based on the presented models for self-destructiveness (Leith & Baumeister, 1996), fear of failure can be placed in the second model of self-destructiveness; a person sacrifices potential opportunities in order to avoid negative emotional experience.

Another factor that seems to be different in two groups of teenagers in divorced and normal families is personality traits. One of the theories that examines the individual and personality differences of people is Eysenck's theory. In classifying personality traits, Eysenck pays special attention to the role of biological factors and states that two-thirds of traits are caused by biological factors. They do not neglect environmental factors in the formation of these traits (Eysenck & Chan, 1982), this theory summarizes the complexities of personality in the form of extroversion, neuroticism and psychosis (Eysenck, 1967). Goldberg (1999) considers personality traits to include five strong factors, which are neuroticism, extroversion, openness to experience, agreeableness, and conscientiousness. Extroverted people are social, have more friends, and participate more in social activities (Sedaghat et al., 2014), extroverted people are less sensitive to pain and punishment and need a high level of arousal to stimulate (Adan et al., 2010). People with a neurotic personality style show more emotional reactions and are aroused to things more than other people; these people tolerate high anxiety and tension (Sedaghat et al., 2014). Additionally, people with a psychotic personality style are aggressive, cold, lacking in empathy and self-centered (Adan et al., 2010).

Teenagers who are under the stress of parental separation show more neurotic symptoms in stressful situations; moreover, the emotional and avoidance symptoms in this group of teenagers are more than those from normal families (Ghamari & Fakoor, 2010). In terms of the differences between two groups of teenagers from divorced and normal families in personality traits, Parzham (2018) also states that teenagers from divorced families are clearly different from teenagers from normal families in psychopathic traits, flexibility, and extroversion. Another research on the difference in the characteristics of teenagers in divorced and normal families shows that the mental health of children of families with a lot of conflict in their relationships is lower than that of normal families. The feeling of being stuck in parent-child relationships after

divorce increases with the increase of conflict between parents and predicts behavioral problems as well as a decrease in mental health after divorce (Afifi, 2003).

According to the mentioned research results, it can be stated that the children of divorced families have psychological and behavioral problems compared to normal families (Bernardi & Radi, 2014). By reviewing the literature, it is revealed that in the studies that investigated self-destructive behaviors in teenagers, researcher-made scales were used; it is either performing delinquent acts or self-harm which considered to be an indicator of self-destructiveness. To the best of the author's knowledge, using a valid scale to explore self-destructive tendencies in teenagers from divorced families had not been investigated. In doing so, the present study was conducted with the aim of comparing self-destructive tendencies, fear of failure, and the big five personality traits in teenagers from divorced and normal families. It tries to answer the following question: Is there a difference between self-destructiveness, fear of failure, and the big five personality traits in adolescent boys from divorced and normal families?

2. Method

2.1. Research design

The research method was descriptive-comparative. The population of this research was adolescent boys aged 15 to 18 years studying in the second grade of high school in the academic year of 2018-2019 in Karaj. According to statistical principles, for semi-experimental and causal-comparative research, 30 participants are enough as the sample (Delavar, 2015). In this regard, 45 students whose parents were divorced were selected using purposive sampling. For the sample of teenagers from normal families, 45 students were randomly selected from the classmates of teenagers from divorced families. The inclusion criteria for the research were the given consent for participating in the research and the absence of physical diseases as well as mental retardation. The criteria for leaving the research included the unwillingness to continue collaborating on the research. The participants in the research were all informed that their information will remain completely confidential, and the results will be analyzed in groups. For sampling, after obtaining an introductory letter from the university and referring to the Department of Education for conducting the research in two all-boys high schools, and after obtaining the consent of the high school staff and referring to the students' files, teenagers from divorced families were selected purposefully. Teenagers from normal families were randomly selected from the list of the same class as teenagers from divorced families in which they were present. It is worth mentioning that the sampling was done in the first months of the academic year and before the closure of schools due to the spread of the Covid-19.

2.2. Instruments

To collect data, the following questionnaires were used:

Chronic Self-Destructive Scale (CSDS): The chronic self-destructive scale was developed by Kelley et al. (1985). This scale

has 73 items. The contents of the items cover four areas of tolerance, poor health care, evidence of transgression and lack of planning. The scoring method of the questionnaire is in the form of a Likert scale from 5 (completely applies to me) to 0 (does not apply to me at all). The higher the individual's score, the more self-destructive he or she is. Some items are specific to women and some are specific to men, and some items are common in both genders. The internal consistency of the original version has been reported using Cronbach's alpha coefficient of 0.97 to 0.73 and one-month test-retest reliability coefficient of 0.98 to 0.90 (Kelley et al., 1985). In this research, since all the participants were boys, the Persian version for males was used, which has elements of inconsideration and lack of obligation (items 68, 54, 69, 14, 26), neglect (items 18, 66, 65, 62, 2, 29, 67, 25), risk taking (items 12, 34, 3, 21, 32, 30, 17), and stupefaction (items 70, 71, 27). The Persian version of this questionnaire has a Cronbach's alpha of 0.84 and its convergent validity was confirmed by calculating the Pearson correlation between the total score and the CSDS factors with the variables of depression, shame, guilt, internal self-criticism and comparative self-criticism. The correlation score of total CSDS in women with the above variables was reported to be 0.42, 0.51, 40.9, 0.36 and 0.27 respectively and in men with the same variables, 0.38, 0.38, 0.43, 0.60, 0 and 0.35 respectively (Mousavi et al., 2015). In the present study, the Cronbach's Alpha of the questionnaire was also 0.82.

Performance Failure Appraisal Inventory (PFAI): To assess performance failure, a short 41-question performance failure appraisal inventory, developed and edited by Conroy et al. (2010), was used. This scale includes 41 items with five sub-scales as fear of experiencing shame and embarrassment (items 4, 11, 22, 30, 34, 38, 40 and 41), fear of devaluing one's self-estimate (items 1, 2, 6, 7, 9, 12, 16, 17, 21, 26, 27, 31 and 35), fear of having an uncertain future (items 3, 8, 13, 14, 18, 23 and 37), fear of losing social influence (items 19, 20, 24, 28, 32, 36 and 39), and fear of upsetting important others (items 5, 10, 15, 25, 29 and 33). The answers to each of these items range on a scale from completely disagree (score 1) to completely agree (score 5) and items 9, 17, 18, 21, 23 and 35 are scored inversely. A higher score in this questionnaire means more fear than failure in performance. Conroy et al. (2010) reported Cronbach's alpha reliability coefficients of the subscales of the questionnaire ranging from 0.74 to 0.88, and Rajabi and Abbasi (2012) reported internal consistency coefficients (Cronbach's alpha) of this scale in the whole sample and in males as well as females 0.79, 0.70 and 0.83 respectively. The validity of the Persian version was confirmed using factor analysis, and in all five subscales the ratio of Chi- square to degree of freedom was less than 3, GFI, NFI and CFI indices were more than 0.90 and RMSE was less than 0.05 (Abdoli et al., 2013). In the present research, Cronbach's alpha of the questionnaire was 0.80.

The NEO Five-Factor Personality Inventory (NEO-FFI): This instrument was developed by Goldberg (1999), which contains 50 items. In this questionnaire, there are 10 items to evaluate each of the big five personality traits. These five traits are often

called neuroticism (items 24, 4, 44, 49, 29, 19, 14, 9, 34 and 39), extroversion (items 31, 21, 46, 11, 1, 26 and 16), openness to experience (items 25, 15, 50, 20, 10, 30, 35, 5, 40 and 45), agreeableness (items 32, 7, 2, 22, 17, 12, 37, 27 and 42) and conscientiousness (items 38, 28, 43, 18, 8, 48, 33, 13 and 3). The scoring method of this questionnaire is based on a five-point Likert scale. In this way, 1 score is given to "I totally disagree" and 5 scores are given to "I totally agree", and items 2, 6, 8, 9, 12, 16, 18, 19, 22, 26, 28, 32, 38, 41, 46 are scored in reverse. Goldberg (1999) concluded that Cronbach's alpha of the subscales of neuroticism, extroversion, openness to experience, agreeableness, and conscientiousness as 0.79, 0.76, 0.54, 0.61, and 0.78, respectively, and the validity through correlation with Cattel's 16-factor test and California Personality Questionnaire were 0.86 and 0.62 respectively. Khormaee and Farmani (2014) highlighted that Cronbach's alpha of neuroticism, extroversion, openness to experience, agreeableness, and conscientiousness subscales were 0.83, 0.72, 0.69, 0.83, and 0.81 respectively. Exploratory and confirmatory factor analysis of the Persian version of this questionnaire in Farahani and Farzad's (2008) research confirmed the 5-factor model and indicated the construct validity of the scale. GFI and RMSE were 0.91 and 0.05, respectively.

For data analysis, descriptive statistics (mean and standard deviation) and inferential methods (multivariate analysis of variance) were used. Kolmogorov Smirnov test was used to check the normality of the distribution and Levine's test was run to check the equality of variances.

3. Results

In the present study, two groups of 45 adolescent boys from divorced and normal families were compared in the variables of personality traits, fear of failure and self-destructiveness. The average age (and standard deviation) of the participants in the study was 17.24 (1.34) in the divorce family group and 17.13 (1.12) in the normal family group. 37, 38 and 25 percentage of participants were from 10th, 11th and 12th grades, respectively. Table 1 shows the mean and standard deviation of the studied variables in two groups.

Table 1

Mean and standard deviation of research variables in adolescents from divorced and normal families

Variable	Subcomponents	M	SD	M	SD
		Divorce		Normal	
Self-destructiveness	inconsideration and lack of obligation	22.20	2.84	6.64	2.27
	Neglect	26.44	2.98	19.80	1.85
	risk taking	28.06	3.51	12.60	2.72
	stupefaction	13.46	1.56	4.11	1.33
fear of failure	Fear of experiencing shame and	36.11	3.97	10.71	3.50
	Fear of devaluing one's self-estimate	54.97	3.92	21.62	4.06
	Fear of having an uncertain future	28.35	2.04	12.82	1.73
	Fear of losing social influence	31.53	3.65	9.71	3.34
	Fear of upsetting important others	17.46	1.30	17.55	1.53
Big five personality traits	neuroticism	41.24	1.79	11.66	2.81
	extroversion	16.06	1.03	25.73	1.17
	openness to experience	24.71	2.19	27.64	1.84
	agreeableness	12.64	2.39	41.77	2.61
	Conscientiousness	15.84	1.79	38.35	2.12

As it can be seen in table 1, there is a difference in the mean scores of the two groups at the descriptive level. In order to check the significance of this difference, it is necessary to use inferential tests. Before performing the multivariate analysis of variance test, the Kolmogorov Smirnov test was used to measure normality in order to perform parametric statistics. The significance level for all three variables was greater than 0.05, and therefore, assuming the normal distribution of the variables, the analysis of variance test was run. The condition of equality of variances was also verified using Levine's test.

Table 2

Quadruple tests to determine the difference in dependent variables in two groups of adolescent boys from divorced and normal families

Effect	Test	Value	F	hypothesis df	error df	P	Effect size
Group	Pillai's trace	0.985	306.30	16	73	0.000	0.985
	Wilks Lambda	0.015	306.30	16	73	0.000	0.985
	Hetelling's trace	67.134	306.30	16	73	0.000	0.985
	Roy's Largest Root	67.134	306.30	16	73	0.000	0.985

Table 3

The results of multivariate analysis of variance to compare self-destructiveness, fear of failure and the big five personality traits in adolescent boys from divorced and normal families

Variable	Subcomponents	sum of square	df	Mean square	p	Effect size
Self-destructiveness	inconsideration and lack of obligation	5444.44	1	5444.44	0.000	0.903
	Neglect	993.34	1	993.34	0.000	0.646
	risk taking	5382.40	1	5382.40	0.000	0.861
	stupefaction	1969.34	1	1969.34	0.000	0.914
	Self-destructiveness	31285.37	1	31285.37	0.000	0.425
fear of failure	Fear of experiencing shame and	14516.100	1	14516.100	0.000	0.922
	Fear of devaluing one's self-estimate	25569.878	1	25569.878	0.000	0.948
	Fear of having an uncertain future	5428.900	1	5428.900	0.000	0.945
	Fear of losing social influence	10714.711	1	10714.711	0.000	0.908
	Fear of upsetting important others	0.178	1	0.178	0.768	0.001
	Fear of failure	208995.211	1	208995.211	0.000	0.934
Big five personality traits	neuroticism	19684.011	1	19684.011	0.000	0.962
	extroversion	2102.500	1	2102.500	0.000	0.951
	openness to experience	193.600	1	193.600	0.000	0.349
	agreeableness	19096.900	1	19096.900	0.000	0.972
	conscientiousness	11401.878	1	11401.878	0.000	0.971

The results shown in Tables 2 and 3 indicated that there was a significant difference between adolescent boys from divorced and normal families in the overall score of self-destructiveness (p≥0.001, F=64.94), inconsideration and lack of obligation (p≥0.001, F=818.28), neglect (p≥0.001, F=160.60), risk-taking (p≥0.001, F=543.43) and stupefaction (p≥0.001, F=933.52). In the fear of failure variable, in four of the five components, that is, fear of experiencing shame and embarrassment (p≥0.001, F=1035.45), fear of devaluing one's self-estimate (p≥0.001, 1600.64) F=), fear of having an uncertain future (p≥0.001, F=1507.61) and fear of upsetting important others (p≥0.001, F=872.69) the differences were significant between the two groups. In addition, there were significant differences between the two groups in all five subscales of the big five personality traits: neuroticism (p≥0.001, F=2202.94), extroversion (p≥0.001, F=1719.52), openness to experience (p≥0.001, F=47.12),

agreeableness (p≥0.001, F=3032.96) and conscientiousness (p≥0.001, F=1788.59).

4. Discussion

The aim of the present study was to compare self-destructiveness, fear of failure, and five big personality traits in adolescent boys from divorced and normal families. The results indicated that the overall score of self-destructiveness (p≥0.001, F=64.94) and the score of subscales of inconsideration and lack of obligation (p≥0.001, F=818.28), neglect (p≥0.001, F=160.60), risk-taking (p≥0.001, F=543.43) and stupefaction (p≥0.001, F=933.52) were higher in adolescent boys from divorced families than male teenagers from normal families. Behaviors that decrease the chance of future success and increase the probability of failure were mentioned in the definition of self-destruction. Inconsideration and lack of obligation due to not having a plan and not sticking to it can clearly reduce the chances of future success. Furthermore, a look at some of the items of the neglect subscale shows how a high score in this component can be associated with self-destructiveness; "I don't have an account of my income and expenses"/ "Most of the time, I avoid doing obligatory things that are boring"/ "It seems that sometimes I don't pay attention to what happens to me"/ "Even though I know that some things don't have a good outcome, I do them". Risk-seeking and stupefaction also mean the acceptance of risk and the desire to engage in behaviors such as smoking, which were generally higher in teenagers from divorced families than teenagers from normal families. These results are consistent with the previous findings (Strohschein, 2012; Thompson et al., 2017; Yaghobi et al., 2011; Das, 2010; Motataianu, 2015) which revealed that divorce is related to self-destructiveness in teenagers. It can also be said that this result is consistent with previous findings (Lindström & Rosvall, 2019; Brand et al., 2019; Molepo et al., 2012), expressing that people with unfulfilled needs such as having a close relationship which is satisfying may experience less security and be more at risk for engaging in self-destructive, self-harm, and risky behaviors. Moreover, in some studies (Thompson et al., 2017; Molepo et al., 2012; Shirzad, 2019) negative experiences in the family as well as lack of relationship with parents, such as the absence of a caring parent and the lack of creating a sense of security in children, are some of the influencing factors. In this regard, it should be noted that it is related to the occurrence of behavioral and emotional problems such as self-destructiveness, which is in line with the results of the present study.

In explaining this finding, it can be said that divorce and problems within the family, such as conflicts, have a negative effect on teenagers. Self-destructive people are at high risk of ideation and self-harm. In addition, there are some personality traits such as impulsivity and emotional instability in self-destructive people. These people have emotional difficulty in understanding the behavior that ultimately leads to self-harm, and they negligently expose themselves to great harm. This lack of understanding of the appropriate emotional state leads to high-risk behaviors, and thus, this practice increases risk-taking in these people, because they do not have a sound understanding of the consequences of harm, and in order to avoid

problems and avoid facing them, they tend to behave in ways that reduce anxiety in the short term so that they do not experience their inner tension. The lack of adaptive response to negative emotions and the increase of maladaptive responses to negative emotions cause an increase in thoughts and imaginations and practices of self-destructiveness in people. Suppression is a general term used to describe the tendency to suppress experience, not to express negative emotions and unpleasant understandings to prevent threats to an individual's self-image. Unpleasant experiences, events, and traumas created in the family environment cause a person to use ineffective coping strategies such as emotional suppression or cognitive avoidance. When emotional suppression or cognitive avoidance becomes one of the main methods of facing stressful events, their access is blocked to correct cognitive, emotional and behavioral methods of problem solving. As a result, the use of ineffective defense mechanisms causes the harmed person problems about managing stress. On the other hand, from the psychoanalytic point of view, the continuous accumulation of emotions, excitements and negative beliefs in the unconscious mind can endanger a person's health in different ways. One of these ways is to turn negative emotions, excitements and beliefs towards oneself, and as a result blaming and considering oneself worthless, which can ultimately increase self-destructiveness. Therefore, it can be said that the use of inefficient methods such as emotional suppression, which can decrease psychological health level in a person, plays a facilitating role in the emergence of disorders such as depression and self-destructiveness.

Additionally, the results indicated that there was significant difference between the means of fear of failure and the sub-components of fear of experiencing shame and embarrassment, fear of devaluing one's self-estimate and fear of losing social influence in adolescent boys in divorced and normal families. The mean in these variables were higher in adolescent boys in divorced families than in the normal group, but there was no significant difference between the two groups in the sub-component of fear of upsetting important people. This result is in line with the findings of Amato and Patterson (2017), Molepo et al. (2012), Das (2010), Motataianu (2015), Tohidi-Moghadam and Kordi-Tamandani (2017) and Shirzad (2019), who stressed that divorce with internalized problems include a kind of main confusion in his or her thinking style and about the future.

It can be said that, according to previous research, the absence of parents has short-term and long-term psychological effects on teenagers due to divorce. Consequently, teenagers with the experience of parental divorce may choose styles that continuously create thinking of failure in the individual, and in this way, leads to a decrease in the type of logical thinking in different situations. In other words, teenagers in divorced families may express the fear caused by the loss of their parents that they have already experienced, shown in the form of fear of experiencing a failure again to respond to situations and generalize a failure to other situations to establish a secure relationship with their parents (Wagner et al., 2007).

Because of the fear of failure, these people continuously provide the conditions for failure in a way that creates failure in a cyclical manner. This happens unconsciously in a person, and, since a person does not see himself or as acceptable for success, he or she experiences a sense of shame and a decrease in self-esteem in his or her social relationships. A teenager who has perceived the initial safe environment of his life to be insecure somehow considers himself or herself lost in that institution and sees his or her personal strengths as weakness. In addition, in this sense, he is constantly worried about his chronic self-Inferiority in one's community and relationships (Wagner et al., 2010).

Fear of failure can also be understood as part of self-destructive behaviors along the same continuum of self-destructiveness. According to the models presented by Leith and Baumeister (1996), the fear of failure is placed in the second model (balanced model). Fear of failure can cause a person to participate less in activities in order to avoid failure, and therefore, as much as it prevents future failure, it also reduces the probability of future success. On the other hand, if we take a look at the two variables of self-destructiveness and fear of failure from the perspective of psychoanalysis, both cases can be considered punishment functions of conscience. In other words, from the psychoanalytical point of view, self-destructiveness is imposing punishment to oneself. All the adversities that arise as a result of an inappropriate environment can spill over under the influence of self-destructive tendencies; "The need to be sick or to suffer" is a term used by Freud to explain unusual psychotic reactions. According to him, the feeling of guilt is the first factor playing a role in these abnormal reactions. Another factor is called self-destructiveness, and Freud refers to it as *inversion of self-preservation*, *self-injury* and *self-destructiveness* (Freud, 1993, as cited in Payande, 2004).

On the other hand, results demonstrated that there was a difference between the five major personality traits (neuroticism, extroversion, openness to experience, agreeableness, and conscientiousness) in the two groups of adolescent boys in divorced and normal families, and the degree of extroversion, openness to experience, agreeableness and conscientiousness which were higher in teenagers in normal families; additionally, the level of neuroticism was higher in teenagers from divorced families. This result is in line with the findings of Parzham (2018), Fayaz and Kiani (2011), Amato and Patterson (2017) and Strohschein (2012).

Among the limitations of the current research, we can point out the lack of control of variables such as cultural, economic, and family conditions, which may have had an effect on the results. Furthermore, considering that this research was done at the beginning of the Covid-19 pandemic, the high level of anxiety caused by this pandemic may have affected the results. For future researches, it is suggested that the researchers repeat the research in different geographical locations, with gender comparisons which may lead to interesting results. The possibility of using a larger sample of children in divorced families, selected

randomly, will increase the possibility of generalizing the results.

5. Conclusion

The results showed that the degree of self-destructiveness, including inconsideration and lack of obligation, neglect, risk-taking, and stupefaction, was higher in adolescent boys from divorced families than from normal families. Additionally, the average fear of failure and its subscales were higher in boys in divorced families than in normal families. Divorce and its stressful consequences for children can lead to the formation of self-destructive tendencies and behaviors in such children.

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Conflict of interest

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References

Abdoli, B., Ahmadi, N., Azimzadeh, E., Afshari, J. (2013). To determine the validity and reliability of performance failure appraisal inventory. *Journal of Motor Learning and Movement*, *5*(2), 37–48. https://doi.org/10.22059/jmlm.2013.32146

Adan, A., Natale, V., Caci, H., Part, G. (2010). Relationship between circadian typology and functional and dysfunctional impulsivity. *Chronobiology international*, 27, 616-619. https://doi.org/10.3109/07420521003663827

Afifi, T. G. (2003). Feeling caught in stepfamilies: Managing boundaries turbulence through appropriate communication privacy rules. *Journal of Social and Personal Relationships*, *20*(6), 729-755. https://doi.org/10.3109/07420521003663827

Amato, P. R., & Hohmann-Marriott, B. (2007). A comparison of high- and low-distress marriages that end in divorce. *Journal of Marriage and Family*, *69*(3), 621–638. https://doi.org/10.1111/j.1741-3737.2007.00396.x

Amato, P. R., & Patterson, S. E. (2017). The intergenerational transmission of union instability in early adulthood. *Journal of Marriage and Family*, *79*(3), 723-738. https://doi.org/10.1111%2Fjomf.12384

Baumeister, R.F., & Scher, S.J. (1988). Self-defeating behavior patterns among normal individuals: review and analysis of common self-destructive tendencies. *Psychological Bulletin*, *104*(1), 3-22. https://doi.org/10.1037/0033-2909.104.1.3

Bernardi, F., & Radi, J. (2014). The long term consequences of parental divorce for children's educational attainment. *Demographic Research*, *30*(61), 1653-1680. https://doi.org/10.4054/DemRes.2014.30.61

Berry, L., Stoyles, G., & Donovan, M. (2010). Post separation parenting education in a Family Relationship Centre: A pilot study exploring the impact on perceived parent-child relationship and acrimony. *Journal of Family Studies*, *16*, 224-236. https://doi.org/10.5172/jfs.16.3.224

Brand, J. E., Moore, R., Song, X., & Xie, Y. (2019). Parental divorce is not uniformly disruptive to childrens educational attainment. *Proceedings of the National Academy of Sciences of the United States of America*, *116* (15), 7266-7271. https://doi.org/10.1073/pnas.1813049116

Conroy, D. E., Kaye, M. P., & Fifer, A. M. (2007). Cognitive links between fear of failure and perfectionism. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, *25*, 237-252. http://dx.doi.org/10.1007/s10942-007-0052-7

Conroy, D. E., Willow, J. P., & Metzler, J. N. (2010). Multidimensional fear of failure measu*rement: The performance failure appraisal inventory*. *Journal of Applied Sport Psychology*, *14*, 76–90. https://doi.org/10.1080/10413200252907752

Das, C. (2010). Resilience, risk and protective factors for British- Indian children of divorce. *Journal of Sociology*, *25*, 97-108. https://doi.org/10.1080/09718923.2010.11892869

Delavare, A. (2015). *Research method in psychology and educational sciences*. Tehran: Virayesh Pub.

Eysenck, H. J. (1963). Biological basis of personality. *Nature*, *199*, 1031-1034. https://doi.org/10.1038/1991031a0

Eysenck, H. J. (1967). *The biological basis of personality* (100-117). Springfield, IL: Thomas.

Eysenck, S. B. G., & Chan, J. (1982). A comparative study of personality in adults and children: Hong Kong and England. *Personality and Individual Differences*, *3*(2), 153-160. https://doi.org/10.1016/0191-8869(82)90029-0

Farahani, M. N., & Farzad, V. (2008). Validity and Reliability of Iranian Big Five Factor (GARDOON). *Journal of Psychological Studies*, *4(*2), 57-80. https://doi.org/10.22051/psy.2008.1627

Fayaz, I., & Kiani, J. (2011). A survey on the mental health status of the adolescents in Shahid Dastgheyb and namaazi orphanages of Shiraz. *Psychology of Exceptional Individuals*, *1*(2), 19-48. https://jpe.atu.ac.ir/article_2031.html?lang=en

Fletcher, A., Bonell, C. (2008). Hargreaves J. School effects on young people's drug use: a systematic review of intervention and observational studies. *Journal of Adolescence Health*, *42* (3), 209–220. https://doi.org/10.1016/j.jadohealth.2007.09.020

Gauffin, K., Vinnerljung, B., Fridell, M., Hesse, M., & Hjern, A. (2013). Childhood socio-economic status, school failure and drug abuse: a Swedish national cohort study. *Addiction*, *108* (8), 1441–1449. https://doi.org/10.1111/add.12169

Ghamari, M., & Fakoor, E. (2010). The comparison of coping strategies and mental health and the relationship of these variables among students of divorced and non-divorced parents. *Journal of Behavioral Sciences, 2(*4), 119-132. https://sid.ir/paper/190510/en

Goldberg, L. R. (1999). A Broad-Bandwidth, Public Domain Personality Inventory Measuring the Lower-Level Facets of Several Five-Factor Models. In I. Mervielde, I. Deary, F. De Fruyt, & F. Ostendorf (Eds.),

Personality Psychology in Europe, Vol. 7 (pp. 7-28). Tilburg, The Netherlands: Tilburg University Press.

Kelley, K., Byrne, D., Przybyla, D., Eber|y, C., Ebedy, B., & Greendlinger, V., et al. (1985). Chronic self-destructiveness: Conceptualization, measurement, and initial validation of the construct. *Motivation and Emotion*, *9*(2), 135-51. https://psycnet.apa.org/doi/10.1007/BF00991572

Khormaee, Farhad., & Farmani, Azam. (2014). Psychometric Properties of the Short Form of Goldberg's 50- Item Personality Scale. *Psychological Methods and Models*, *4*(16), 29-39. https://dorl.net/dor/20.1001.1.22285516.1393.4.16.3.2

Leith, K.P., Baumeister, R.F. (1996). Why do bad moods increase self-defeating behvior? Emotion, risk taking, and self-regulation. *Journal of personality and social psychology, 71*(6), 1250-1267. https://doi.org/10.1037//0022-3514.71.6.1250

Lindström, M., & Rosvall, M. (2019). Parental separation/divorce in childhood and tobacco smoking in adulthood: A population-based study. *Scandinavian Journal of Public Health*, *48*(6), 657-666. https://doi.org/10.1177/1403494819846724

Maghsoodlo, M., Azadfallah, P., Rasoolzadeh, K., & Mansoori Sepehr, R. (2016). Comparison of Eysenck personality dimensions according to morningness-eveningness rhythms. *Clinical Psychology & Personality (Daneshvar Raftar), 14*(1 (26)), 43-50. https://doi.org/10.22070/14.1.43

Molepo, L. S., Sodi, T., Maunganidze, L., & Mudhovozi, P. (2012). Behavioural and emotional development in children of divorce. *Journal of Psychology in Africa*, *22*(2), 251-254.

Motataianu, I. R. (2015). The Relation between Anger and Emotional Synchronization in Children from Divorced Families. *Social and Behavioral Sciences*, *203*, 158-162. https://doi.org/10.1016/j.sbspro.2015.08.275

Mousavi, A.S., Azadfalah, P., Farahani, H., Dehghani, M. (2015). The validity, reliability and factorial structure of the Chronic Self-Destructiveness Scale (CSDS). *Iranian Journal of Psychiatry and Clinical Psychology*, *21* (2), 132-143. http://ijpcp.iums.ac.ir/article-1-2429-en.html

Parzham, V. (2018). *Comparison of personality characteristics, attachment styles and identity styles in adolescents of divorced and normal families*. Thesis for MA in clinical psychology, Islamic Azad University Behshahr. https://civilica.com/doc/697099

Payande, H. (2004). *Principles of psychoanalytic theory*. Arghanoon, 22, 1-73. http://noo.rs/MhqQc

Rajabi, G., & Abasi, Gh. (2012). An investigation of relationship between self-criticism, social interaction anxiety, and fear of failure with internalized shame in students. *Research in Clinical Psychology and Counseling*, *1*(2), 171-182. https://doi.org/10.22067/ijap.v1i2.9837

Schimmenti, A., Bifulco, A. (2015). Linking lack of care in childhood to anxiety disorders in emerging adulthood: the role of attachment styles. *Child and Adolescence Mental Health, 20*(1), 41–8. https://doi.org/10.1111/camh.12051

Sedaghat, M., Bahrami, H., Kiamanesh, A.R., & Lak, Z. (2014). Comparison of characteristics in popular and solitary girl students. *Clinical Psychology & Personality (Daneshvar*

Raftar), *20*(9), 13-22. https://dorl.net/dor/20.1001.1.23452188.1392.11.2.3.1

Sharifi Daramadi, P. (2007). Comparison of mental hygiene state of divorce, orphan and normal adolescents between 15 and 18 years old in Isfahan city. *Quarterly Educational Psychology*, *2*(8), 71-98. Sid. https://doi.org/10.22054/jep.2007.6011

Shirzad, P. (2019). *Comparison of aggression, life expectancy and behavioral problems in divorced and non-divorced children.* National Conference on Educational Science Technology and Knowledge, Social Studies and Psychology of Iran. https://civilica.com/doc/821864

Stephen, M. L., Tholene, S., Levison, M., Pilot, M. (2012). Behavioural and Emotional Development in Children of Divorce. *Journal of Psychology in Africa*, *2*, 22. https://doi.org/10.1080/14330237.2012.10820525

Storksen, I., Roysamb, E., Holmen, T. L., Tambs, K. (2006). Adolescent adjustment and well-being: Effects of parental divorce and distress. *Scandinavian. Journal of Psychology*, *47*(1), 75-84. https://doi.org/10.1111/j.1467-9450.2006.00494.x

Strohschein, l. (2012). Parental divorce and child mental health: Accounting for predisruption deference. *Journal of divorce &remarriage*, *53*(6), 489-502. http://dx.doi.org/10.1080/10502556.2012.682903

Thompson, R.G., Jr., Alonzo, D., Hu, M.C., & Hasin, D.S. (2017). The influences of parental divorce and maternal-versus-paternal alcohol abuse on offspring lifetime suicide attempt. *Drug and Alcohol Review*, *36*(3), 408-14. https://doi.org/10.1111/dar.12441

Tohidi-Moghadam, H., Kordi-Tamandani, F. (2017). *Comparison of mental health, life expectancy and self-image between abused and normal girls*. National Conference on Psychology and Social Injury Management. Islamic Azad University, Chabahar branch. https://civilica.com/doc/556696

Wagner, A.W., Rizvi, S.L., Harned, M.S. (2007). Applications of dialectical behavior therapy to the treatment of complex trauma-related problems: when one case formulation does not fit all. *Journal of Traumatic Stress*, *20*(4):391-400. https://doi.org/10.1002/jts.20268

Wilson Van Voorhis, C.R., L Morgan, B. (2007). Understanding power and rules of thumb for determining sample size. *Methods for Psychology*, *3*(2), 43-50. https://doi.org/10.20982/tqmp.03.2.p043

Yaghobi, K., Sohrabi, F., Mofidi, F. (2011). A comparative study of the degree of aggression among divorced and not divorced children. *Journal of Psychological Studies*, *7*(1), 97-110. https://doi.org/10.22051/psy.2011.1558

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Research Paper: The Effectiveness of Group Poetry Therapy on Improving Positive and Negative Symptoms in Chronic Schizophrenia Patients

Fahimeh Rajaei [1], Akbar Atadokht[2], Sajad Basharpour[3], Soude Mamashli[4]

[1] *M. A. in Clinical Psychology, University of Mohaghegh Ardabili, Ardabil, Iran*
[2] *Professor, Department of General Psychology, University of Mohaghegh Ardabili, Ardabil, Iran*
[3] *Professor, Department of General Psychology, University of Mohaghegh Ardabili , Ardabil, Iran*
[4] *M. A. in Family Counseling, Islamic Azad University, Azadshahr Branch, Azadshahr, Iran*

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Abstract

Poetry therapy, a form of creative art therapy, utilizes poetry and other stimulating forms of literature to achieve therapeutic goals and promote personal growth. Research has shown the effectiveness of positive and negative symptom control and treatment in schizophrenia, highlighting the need for non-pharmacological interventions. Poetry therapy has emerged as one such intervention in this domain. Therefore, the present study aimed to investigate the effectiveness of group poetry therapy on positive and negative symptoms in patients with schizophrenia. This quasi-experimental study employed a pretest-posttest design with a control group. The statistical population of the study were hospitalized patients in treatment and rehabilitation centers in Ardabil city. Using cluster random sampling, 22 participants were selected and randomly assigned to the experimental and control groups. The experimental group received eleven sessions of group poetry therapy, while the control group did not receive any intervention. Data were collected using the Positive and Negative Syndrome Scale (PANSS) and analyzed through one-way analysis of covariance. The results indicated that, after accounting for the pretest effect, the mean of posttest scores of the experimental group participants were lower than those of the control group in positive and negative symptoms ($P<0.05$), confirming the effectiveness of group poetry therapy intervention. This study demonstrated that group poetry therapy is an effective non-pharmacological treatment for individuals with chronic schizophrenia and can be implemented by clinical professionals in treatment centers.

*** Corresponding author:**
Akbar Atadokht
Address:. Department of General Psychology, University of Mohaghegh Ardabili, Ardabil, Iran
Tel: +98 (914) 452 9612
E-mail: atadokht@uma.ac.ir

1. Introduction

Schizophrenia is a term that was first introduced by Eugen Bleuler in 1911. It is a symbolic representation of profound behavioral and personality disorders (Strunoiu et al., 2019). Psychiatric disorders refer to a significant category of psychological disorders characterized by a common feature of patients' disconnection from reality, including profound disturbances in thinking, emotional expression, perception, and emotions (World Health Organization, 2016). These disorders often impair various functional domains such as family, social, occupational, and educational ones (Sadok & Sadok, 2011).

Currently, approximately 450 million people worldwide suffer from various mental disorders (Bonner et al., 2012). The annual incidence of schizophrenia is estimated to be between 0.2% to 2 per 10,000 individuals, with a lifetime prevalence of 0.1% to 1.9% (Choi et al., 2016). In a nationwide study of the epidemiology of psychiatric disorders in Iran, the prevalence of psychotic disorders was reported to be 0.49%, and the prevalence of schizophrenia was reported to be 0.1% (Fallahikhoshknab et al., 2016). Therefore, the World Health Organization considers these disorders as major global health problems in the 21st century (Almond et al., 2004).

Recurrence of symptoms or multiple relapses and hospitalization in treatment centers are significant characteristic of psychiatric disorders, imposing considerable medical and non-medical costs on the patient, their family, and society (Halder & Mahato, 2015). Schizophrenia is a major mental disorder that leads to impairments in emotional, cognitive, and social domains (Akbari & Saeidi, 2017). The symptoms of the disease along with cognitive impairments lead to serious disability. In fact, cognitive disorders are early indicators of the disease and particularly predictive of treatment outcomes (Khanmohammadi et al., 2022). Cognitive impairments are particularly common in schizophrenia and can be diagnosed in the early stages, even before starting pharmacological treatment, and remain throughout the course of the illness (Fathi Azar, 2022). Among individuals with schizophrenia, problems in working and long-term memory, attention, executive function, and processing speed occur. In an unusual subgroup, individuals may be largely silent, exhibit abnormal and strange motor behavior, or display undue anxiety, all of which are indicative of hebephrenia (Lesh et al., 2011 CS).

This disorder is characterized by symptoms such as delusions, hallucinations, disorganized speech and behavior, as well as negative symptoms such as cognitive and emotional impairments, and if not treated, at least two of these symptoms must have actively affected a large part of the person's daily life for at least one month. Furthermore, the overall pattern of symptoms related to the disorder should continue for at least six months to confirm the differential diagnosis of this disorder from other psychiatric disorders (American Psychiatric Association, 2013/2015). Schizophrenia is often described in terms of positive and negative symptoms (Simas, 2002). The most significant factor contributing to functional decline and disruption in the lives of individuals with schizophrenia is the presence of negative

symptoms. These symptoms represent a loss of normal emotional responses or other thought processes that are typically present in healthy individuals but are impaired and distorted in individuals with schizophrenia (Berkovitch et al., 2018). Although in the early 21st century, with remarkable scientific advancements in the neurochemical sciences, it is expected that therapeutic efforts for schizophrenia would lean towards pharmacological treatments, non-pharmacological approaches and various forms of psychotherapeutic methods are still in the field for schizophrenia treatment. Modern approaches such as art therapy have gained a special place in the field of therapy in recent decades. Meanwhile, some of these methods, such as music and painting, have gained more popularity, especially in our country. However, the use of other methods, such as poetry, has not yet found their real place. Poetry therapy is a creative art that utilizes poetry and other stimulating forms of literature for therapeutic goals and personal growth, and its various forms are suggested with each approach. On the other hand, poetry therapy can be used as a new and appealing approach to connect deeply with the literary heritage of people in countries, addressing a wide range of psychological disturbances. Poetry therapy is a therapeutic approach in which poetry is used for personal growth and emotional well-being (Mohammadian et al., 2010). It aims to develop accuracy and understanding, self and other awareness, creativity, self-expression, self-confidence, enhancement of individual and interpersonal skills, emotional catharsis and tension release, finding new meanings through positive new ideas and information, and increasing coping with stress. Nowadays, psychiatrists claim that the use of classical poetry in psychotherapy has positive results (Mazza, 2003).

So far, poetry therapy has been used in cognitive-based psychotherapy to address conflicts and internal struggles (Cheryl, 2009). The therapeutic characteristics of poetry include state of regression, sublimation, richness of insight and clarity of perception, providing a state of ambivalence with vague and scattered feelings, and the discharge and elimination of tension (Farvardin, 2019). In fact the term “poetry therapy” includes short stories, novels, anecdotes, tales, plays, articles, and films (Fallahikhoshknab et al., 2016). Poetry therapy is referred to as a cost-effective form of therapy that requires no tools or equipment and can be easily implemented in any setting. To conduct poetry therapy, only paper, some stationary, and a small room are needed. However, the presence of a professional therapist is essential. Compared to medical treatments, poetry therapy does not require expensive pharmaceutical products with side effects (Fallahikhoshknab et al., 2016).

Poetry therapy has been used as a means to explore human conditions since the human language evolved (Collins et al., 2007). Ancient Greeks were among the first humans who intuitively realized the significance of words and emotions in poetry and therapy. In Aristotle’s works, the role of catharsis in emotional therapy has been discussed. Today, emotional catharsis is considered an important aspect of psychotherapy and a therapeutic factor in group therapy, and it is considered a major component of mental

show. The identification of emotions as a principle in emotional catharsis is a crucial point in using poetry in the therapeutic setting. Existentialists believe that poetry can help clients grasp the meaning of life and other states of mind that manifest themselves in the present moment (Mazza, 2003).

Given that poetry therapy can have an impact on positive symptoms such as disorganized speech and negative symptoms like poverty of speech, social withdrawal, and superficial emotion, and also considering that previous studies have demonstrated its effectiveness on elderly, (Mohammadian et al., 2010), depression of students (Gillispie, 2003) education and entertainment for mental patients (Rahbar, 2012), the objective of this study was to investigate the effectiveness of group poetry therapy as a non-pharmacological treatment on individuals with schizophrenia spectrum.

1. Method

The present study was a quasi-experimental pre-test post-test design with a control group. The statistical population of the study consisted of all patients diagnosed with schizophrenia in 2019 in Ardabil's maintenance and rehabilitation centers. Cluster random sampling was used following the entry criteria. The entry criteria included a minimum level of literacy and willingness and consent to participate in the study. Their illness was under control and they were receiving medication. From among the rehabilitation centers in Ardabil, Daralshafa Institute was selected, and then 22 patients out of 50 chronic mental patients of the institute were randomly chosen, 11 for the experimental group and 11for the control group. In this study, the Positive and Negative Syndrome Scale (PANSS) and the Berkeley Expressivity Questionnaire were used. Poetry therapy sessions were conducted for the experimental group every week for 11 sessions, one and a half hours each session. The data were analyzed through the analysis of covariance using version 22 of SPSS software.

1.1. Instruments

The Positive and Negative Syndrome Scale (PANSS): This scale was developed by Kay et al in 1987 to measure the severity of positive and negative symptoms in patients with schizophrenia and assess the symptoms and dimensions of schizophrenia disorder. The scale consists of 30 questions or phrases with 7 options, 12 of which are taken from the Brief Psychiatric Rating Scale and 12 other are extracted from the Schedule for the Deficit Syndrome with the definition of PANSS. The scoring is based on a 7-point Likert Scale (1to7) with a minimum score of 30 and a maximum of 210. In Iran, Bakshipour and Dezhkam (2014) have standardized this questionnaire, and its reliability has been estimated as 0.88 for positive symptoms, 0.87 for negative symptoms, and 0.87 for the overall test. Furthermore, the validity of the questionnaire has been reported to be high when compared with other measurement tools that assess related constructs. A summary of treatment sessions is presented in table 1.

Table 1

Summary of Poetry Therapy (Khodabakhshi Koolaee et al., 2015)

Sessions	Session Descriptions
First Session	Explaining the group rules to patients (such as the need to listen to the speaking members, confidentiality, not interrupting the speaker, mutual respect, and regular attendance), describing the therapeutic process, and requesting them to express their emotions and verbalize whatever comes to their mind without considering its value.
Sessions two to six	Reading poems with content of complaint, anger, resentment, love, and lamentation about the beloved or the passage of time to discharge negative emotions, discussing delusional beliefs, potential hallucinations, and suppressed inner turmoil.
Sessions seven to eight	Reading humorous poems for patients in order to encourage them to change their perspective and outlook on life from a humorous point of view and find a way to cope with life's issues through something other than negativity, excessive seriousness, emotional suppression, or negative emotional expression.
Sessions nine to eleven	Reading motivational and hopeful poems, such as Sohrab Sepehri's "The Sound of Water's Footsteps," with the aim of instilling a sense of hope in life, accepting difficulties, and enjoying life under any circumstances, highlights the value of living simply because of being alive. At the end of the eleventh session, a summary of the previous sessions, the lessons learned from the poems and the therapeutic process, each patient's perception of others in the group, and the importance of continuing to derive pleasure from poetry even after the completion of these sessions (whether in a group or individually) were discussed.

2. Results

In the present study, in terms of educational level of the participants, the experimental group consisted of 4.45% elementary school, 3.27% middle school, and 3.37% diploma, while the control group consisted of 4.36% elementary school, 2.18% middle school, and 4.45% diploma. In terms of economic status, the experimental group had 1.9% good, 3.27% average, and 6.63% poor economic status, whereas the control group had 2.18% good, 3.27% average, and 5.54% poor economic status. Regarding the duration of illness, in the experimental group, 2.18% were under 10 years, 3.27% were between 10-20 years, and 5.54% were above 20 years with schizophrenia, while in the control group, 3.27% were under 10 years, 4.45% were between 10-20 years, and 3.27% were above 20 years with schizophrenia. Table 2 presents the mean and standard deviation of positive, negative, and general symptoms components for both the experimental and control groups in the pre-test and post-test phase.

Table 2

Mean and standard deviation of positive, negative, and general symptoms components in the experimental and control groups at pre-test and post-test stages.

Variable	Test	Control group		Experimental group	
		Mean	Standard Deviation	Mean	Standard Deviation
Positive Symptoms	Pre-test	56.90	13.30	61.27	17.91
	Post-test	54.72	12.64	39.72	11.23
Negative Symptoms	Pre-test	33.54	7.01	23.18	7.35
	Post-test	30.81	8.58	15.27	4.19

Table 2 shows the mean and standard deviation of positive, negative, and overall symptom components for the experimental and control groups in the pre-test and post-test. As observed, the scores of the participants in the experimental group show a significant reduction in all three components during the post-test stage.

Table 3

Results of covariance analysis of post-test scores of positive, negative, and general symptoms with pre-test control.

Components	Homogeneity of Variance (Levene's test)		The effect of pre-test		The main effect of the group		
	F	Sig	F	Sig	F	Sig	η2
Positive Symptoms	53.66	0.001	53.97	0.001	53.35	0.001	0.280
Negative Symptoms	50.34	0.001	88.92	0.001	11.76	0.002	0.337

($p < 0.05$)

Since the number of participants in both groups was equal, there was no issue in using parametric analysis of covariance. The analysis of covariance test indicated a significant reduction in positive and negative symptoms among the experimental group, but this change was not significant in the control group (Table 3).

3. Conclusion

The results of this research showed that group poetry therapy can reduce the positive

and negative symptoms of chronic schizophrenia patients. These findings were consistent with the following studies:

Faraji et al. (2013) demonstrated in their research that group poetry therapy is effective in enhancing cognitive status in the elderly. So, in the control group, an improvement in cognitive status was observed after the implementation of poetry therapy techniques, whereas no significant change was observed in the pre- and post-intervention assessments in the control group. Mohammadian et al. (2010) indicated that group poetry therapy is effective in improving depression in students. Asayesh et al. (2011) showed in their study that group poetry reading is effective in improving social behaviors in schizophrenic patients, reducing aggressive behaviors, general social dysfunction, and overall behavioral problems compared to pre-intervention scores. Gillispie (2003) suggested that the principles and techniques of poetry therapy, particularly instructive poems, are effective in the education of adults with mental illness.

To elaborate the findings more, it can be noted that poetry, like the pressure within a volcano, releases internal pressures and prevents an earthquake from occurring. When emotions such as anger and depression cannot be expressed, they may give rise to symptoms of illness. The process of reading and writing poetry can be seen as an acceptable outlet for pouring out psychological forces that have the potential to explode, thus restoring physiological and psychological balance (Ghamari Givi et al., 2010). Therefore, poetry therapy generally reduces symptoms as a whole.

Poetry and literature are basically everything that has engage language and serve as a catalyst used by the poet-therapist to evoke reactions in individuals and groups. In fact, poetry, like the lava of a volcano releases internal pressures and prevents an earthquake from occurring. When emotions such as anger and depression cannot be expressed, symptoms of illness may emerge. The process of reading and writing poetry can be considered as an acceptable outlet for the release of psychological forces that have the potential to explode. Consequently, it restores physiological and psychological balance (Khodabakhshi Koolaee et al., 2015).

On the other hand, poetry therapy deals with the expression of words. Negative symptoms, like poverty of speech, decrease through the expression found in poetry. Superficial emotions, with the expression of feelings and their externalization, and also receiving empathy from other group members, diminish. In a space where emotions are expressed and understood by others, there is no reason for superficial emotions to exist.

Achieving the goals of poetry therapy in individuals with schizophrenia creates a sense of purpose and coherence in life, awareness of values, acceptance, and significance, which are essential components of meaning in life. Poetry therapy sessions evoke feelings of hope, vitality, dynamism, and ultimately a search for meaning. Thus, due to the lack of available research that examines the effects of group poetry therapy on participants' sense of meaning, we turn to studies that focus on the concept of meaning and meaning-centered interventions in

reducing psychological disorders in the elderly and improving mental health by reducing depression, anxiety, etc.

On the other hand, poetry therapy deals with the expression of words. The poverty of words, which is considered as a negative symptom, is reduced through the expression in poems. Superficial emotions are diminished when feelings are expressed and externalized, and when empathy from others in the group is received. In an environment where emotions are expressed and understood by others, there is no reason for superficial emotions to exist.

Tamura (2001), a cognitive linguistics psychologist who explores language difficulties, assumes that poetry serves as the foundation for solving cognitive disorders. He argues that this approach stabilizes linguistic therapy for schizophrenia, which in turn resolves fundamental cognitive impairments. Since poetry is closely connected to speech and language, it can be effective in resolving cognitive problems. Furthermore, when psychological points are not taught through normal conversations during therapy sessions, but rather in the form of shared poetry, the patients perceive themselves facing a powerful collective cultural process (Mohammadian et al., 2010). In such circumstances, they have to accept certain mistakes in their thinking and beliefs. For example, when patients expressed their delusional and incorrect thoughts during sessions, they were challenged by certain poems and subsequent feedback from other individuals. In an empathetic atmosphere, patients realized that in some instances, they held irrational thoughts. Sometimes, poetry reading triggered paranoia and pessimism in these patients, and others challenged them through their feedback. As a result, in the final sessions, almost every patient gained a relative insight into their delusions and cognitive mistakes, leading to changes in their self-awareness.

This study is conducted only on male patients. Also lack of control over the duration of patients' hospitalization in centers, age heterogeneity among patients, and the absence of follow-up after intervention are among the limitations of this study. It is suggested that in future research, these factors be controlled, and these techniques be tested on female patients and other mood and psychiatric disorders.

4. Conclusion

Poetry therapy sessions can help participants grasp the meaning of life. It also provides an opportunity for members to explore self-awareness, understanding, and emotional release, while strengthening their sense of meaning. Joyful activities such as poetry therapy sessions help individuals with schizophrenia being purposeful in their life, serve as strong support for emotional stability, and ultimately ensure their mental and physical well-being. These sessions contribute to the development of insight, hope, and improved quality of life.

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Conflicts of Interest

There are no conflicts of interest among the authors.

References

Akbari, M., Saeidi, S. (2017). The Effectiveness of Psychosocial Rehabilitation in Reducing Negative Symptoms and Improving Social Skills of Chronic Schizophrenia Patients. *Shenakht Journal of Psychology and Psychiatry*, *4*(3), 21-35. http://dorl.net/dor/20.1001.1.25886657.1396.4.3.4.4

Almond, S., Knapp, M., Francois, C., Toumi, M., & Brugha, T. (2004). Relapse in schizophrenia: costs, clinical outcomes and quality of life. *The British Journal of Psychiatry*, *184*(4), 346-351. https://doi.org/10.1192/bjp.184.4.346

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders, 5th*. (Y. SeyedMohammadi, Trans). Ravan. (Original work published 2015)

Asayesh, H., Fallahi Khoshknab, M., Fadaei, F., Karimloo. M. (2012). The effect of group poetry therapy on social behaviours of schizopherenia. *Iranian Journal of Nursing Research*, *7*(25), 6-16. https://ijnr.ir/browse.php?a_id=1027&sid=1&slc_lang=en

Bakshipour, A., & Dezhkam, M. (2014). Confirmatory factor analysis of positive and negative affect, *Journal of Psychology, 9*(4), 351-365. https://www.sid.ir/paper/54494/en

Berkovitch, L., Del Cul, A., Maheu, M., & Dehaene, S. (2018). Impaired conscious access and abnormal attentional amplification in schizophrenia. *NeuroImage: Clinical*, *18*, 835-848. https://doi.org/10.1016/j.nicl.2018.03.010

Bonner, G. P., Kennedy, B., Moretz, C., Stechschulte, P. (2012). Touched by violence and caring for the were assaulted by their patients in nurses who were (dissertation). (ProQuest dissertations publishing); Univrtsity of Capella.

Cheryl, J. M. (2009).The resolution of internal conflict through performing poetry. *The Art in Psychotherapy*; *36*(4), 222-230. https://doi.org/10.1016/j.aip.2009.04.001

Choi, H., Hwang, B., Kim, S., Ko, H., Kim, S., & Kim, C. (2016). Clinical education in psychiatric mental health nursing: Overcoming current challenges. *Nurse education today*, *39*, 109-115. https://doi.org/10.1016/j.nedt.2016.01.021

Collins, K. S., Furman, R., & Langer, C. L. (2006). Poetry therapy as a tool of cognitively based practice. *The Arts in psychotherapy*, *33*(3), 180-187. https://doi.org/10.1016/j.aip.2005.11.002

Fallahi Khoshknab M ،Fadaee ،F ،Kareemloo ، M. ،Asayesh ،H ،(2007).The impact of group poetry therapy on the mental state of schizophrenic patients ،journal of Rehabilitation. 8(4): 56-61. http://rehabilitationj.uswr.ac.ir/article-1-204-en.html [Persian]

Fallahikhoshknab M, Qorbani M, Fadaei F, Rahmani Anaraki H, Sayesh H. (2016). The effect of poetry therapy group on

communication skills of schizophrenia patients. *Nursing and Midwifery Journal, 13*(11), 919-927. http://unmf.umsu.ac.ir/article-1-2222-en.html

Farvardin, P. (2019). *From poem to poem therapy: Applied poem in psychotherapy.* Tehran: Parviz Farvardin Publication.

Fathi Azar, E., Haghgoo, H., Nosratabadi, M., Sayadnasiri, M., & Hosseinzadeh, S. (2022). Effects of Occupational Therapy Interventions and Brain Stimulation on Visuospatial Memory in Adult Male Patients with Schizophrenia. *Journal of Paramedical Sciences & Rehabilitation, 10*(4), 54-66. https://doi.org/10.22038/jpsr.2022.54049.2199

Faraji, J. Fallahi Khoshenab, M., Khankeh, H. R. (2013). The effect of poetry therapy on depression in elderly residents of a nursing home in Arak. *Iranian Journal of psychiatric nursing, 1*(1), 55-62. http://ijpn.ir/article-1-60-en.html

Ghamari Givi, H., Moulavi, P., Heshmati, R. (2010). Exploration of the factor structure of positive andnegative syndrome scale in schizophernia spectrum disorder. *Journal of Clinical Psychology, 2* (6), 1-10. https://doi.org/10.22075/jcp.2017.2018

Gillispie, C. (2003). Poetry therapy techniques applied to a recreation/adult education group for the mentally ill. *Journal of Poetry Therapy, 16*(2), 97-106. https://doi.org/10.1080/08893670802128424

Halder, S., & Mahato, A. K. (2015). Cognitive impairment in schizophrenia: an overview of assessment and management. *International Journal of Indian Psychology*, *2*, 65-72.

Kay, S. R., Fiszbein, A., & Opler, L. A. (1987). The Positive and Negative Syndrome Scale (PANSS) for schizophrenia. *Schizophrenia Bulletin, 13*(2), 261–276. https://doi.org/10.1093/schbul/13.2.261

Khanmohammadi, R, Sheikh, M, Bagherzadeh, F, Houmanian, D, & Khajovi, D. (2022). The effectiveness of a quiet cognitive rehabilitation program on balance and walking in dual task conditions in male schizophrenic patients with depressive disorder. *Motor Behavior, 14*(47), 65-90. https://doi.org/10.22089/mbj.2020.8547.1861

Khodabakhshi koolaee, A., Heidari, M., FalsafiNejad, M. (2015). Effect of group poetry therapy on depression and search for meaning in life among elderly dwelling at female nursing homes in Tafresh. Journal of Geriatric Nursing, 1 (3), 55-72. https://jgn.medilam.ac.ir/browse.php?a_id=99&sid=1&slc_lang=en

Lesh, T. A., Niendam, T. A., Minzenberg, M. J., Carter, C. S. (2011). Cognitive control deficits in schizophrenia: mechanisms and meaning. *Neuropsychopharmacology, 36*(1), 316-338. https://www.nature.com/articles/npp2010156

Mazza, N. (2003). *The place of poetry therapy in psychology: historical and theoretical foundations. In Poetry Therapy: Theory and Practice*. New York: Brunner-Routledge.

Mohammadian, Y., Shahidi, Sh., Zadeh Mohammadi, A., Mahaki, B. (2010). Evaluating the Use of Poetry to Reduce Signs of Depression in Students. *Journal of Ilam University of Medical Sciences, 18*(2), 9-16. http://sjimu.medilam.ac.ir/article-1-288-en.html

Rahbar, K. (2012). Psychotherapy of the addicted. Chapter 1. Poem therapy page 12. (Full text in Persian).

Sadok, B. J., Sadok, V. A. (2011). Kaplan and sadok's synopsis of psychiatry: Behavioral sciences/clinical psychiatry Lippincott Williams & wilkins.

Simas, A. (2002). Symptoms in the mind: an introduction to descriptive psychopathology. Philadelphia: W. B. Saunders. https://zu.edu.jo/UploadFile/Library/E_Books/

Strunoiu, L. M., Strunoiu, C. M., Chirita, A. L., Tica, A. A. (2019). Factors that Impact Caregivers of Patients with Schizophrenia. *Current Health Sciences Journal*, *45*(3), 301-310. https://doi.org/10.12865%2FCHSJ.45.03.09

Tamura, H. (2001). Poetry therapy for schizophrenia: A linguistic psychotherapeutic model of renku (linked poetry). *The Arts in Psychotherapy*, *28*, 319-238. https://isiarticles.com/bundles/Article/pre/pdf/37153.pdf

World Health Organization. (2016). Health and Social Effects of Nonmedical Cannabis use(The).World Health Organization:2016 Mar 15 https://apps.who.int/iris/handle/10665/251056

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Research Paper: Investigation the Relationship between Sexual Satisfaction and Emotional Divorce among Iranian Couples

Alireza Nikmorad [*1]

[1] *M. Sc. in Clinical Psychology, University Lecturer, Islamic Azad University, Varamin-Phishva Branch, Varamin, Iran*

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Abstract

Family is the oldest and most universal social unit in terms of its history and breadth. Appropriate relationships within society are formed based on appropriate relationships within the family, thereby leading to greater societal stability. The present study aimed to investigate the relationship between sexual satisfaction and emotional divorce among Iranian couples. This study was descriptive-correlational in nature. The statistical population consisted of all couples applying for divorce who referred to family counseling centers supervised by the Welfare Organization in Tehran during the second half of 2020. Using the convenience sampling method, 240 individuals were selected as the sample. The Golombok Rust inventory of sexual satisfaction (GRISS) and the emotional divorce scale were used for data collection. The results indicate a significant and meaningful positive relationship between sexual satisfaction and emotional divorce. Regression analysis also showed that sexual satisfaction can predict 0.3 of the variance in emotional divorce. The results of this study emphasize the role of sexual satisfaction in emotional divorce.

*** Corresponding author:**
Alireza Nikmorad
Address: Islamic Azad University, Varamin-Phishva Branch, Varamin, Iran
Tel: +98 (919) 075 7966
E-mail: nikmoradalireza7@gmail.com

1. Introduction

Marital relationship is the cornerstone of family relationships, in which the needs of spouses are met with mutual respect and cooperation. Individuals living in families with marital unity are in a balanced state of health and well-being while the lack of marital unity can lead to problems, conflicts, and marital disputes (Shirmohammadi et al., 2021 The overall negative evaluation of an individual's marital relationship and unfulfilled needs, desires, and wishes of couples in their marital relationship can lead to marital dissatisfaction, which increases marital problems. (Dong et al., 2022). Current statistics show that about 50% of marriages end in divorce, and the high divorce rate in Iran and the world is a clear sign of marital problems. Factors such as money, sexual relationships, kinship relationships, friends, children, sexual infidelity, emotional problems, financial problems, communication problems, work conflicts, and so on can create marital problems (Forouzanfar & Sayadi, 2019).

One of the consequences of marital problems is emotional divorce (Rasheed et al., 2021). Emotional relationships in marital life usually begin with high excitement and passion, but after a while, due to negligence and unawareness of one or both partners, these emotions decrease gradually, leading to a tendency toward indifference, which is called emotional divorce (Chau et al., 2021).

Emotional divorce is a situation in which the emotional capital between spouses is passively damaged, and despite the lack of love, affection, and intimacy between them, they do not separate from each other due to their responsibility for their life or children (Al-Obaidi, 2017). (Al-Ubaidi, 2017). Emotional divorce is the first stage of the divorce process and indicates the decline of the marital, in which the bitter sense of alienation replaces unity and intimacy (Jarwan & Al-frehat et al., 2020; Horwitz et al., 2019).

According to Sternberg's triangular theory of love, love consists of three elements: intimacy, passion, and commitment. He believes that complete love only occurs when all three elements are present and balanced (Javan Dar Lashki et al., 2019). From Sternberg's perspective, in the stage of emotional divorce, the man or woman has no interest in each other, they are indifferent and cold, and they only continue their relationship due to the sense of responsibility they have towards their life or children. As a result, the external structure of the family is maintained, but it is empty inside, and the couples live together out of necessity and compulsion, without having constructive and appropriate emotional relationships (Gao et al., 2018).

According to Simonič & Klobučar (2017), emotional divorce has essentially negative consequences on both the individuals and the society, creating numerous problems for couples that cause a kind of turmoil and instability in the personalities of family members, and undermines the quality of family relationships and the commitment of spouses.

Sexual relationship is a delicate art that must be done correctly; Otherwise, a relationship that could serve love, affection,

and human understanding will have the opposite negative result and push men and women towards deviation. If, for any reason, healthy sexual relationships are not established between men and women, one or both will become frustrated, disheartened, and dissatisfied, and consequently, if other conditions of understanding are not established, the possibility of the collapse of married life and ultimately more seperation will increase (Gol Mohammadi & Ali Mardani, 2022).

Social characteristics of the individual, his lifestyle, and marital characteristics are also involved in sexual satisfaction (Ebrahimi & Najafipoor Tabestanagh, 2021). Sexual satisfaction is defined as an emotional response resulting from an individual's evaluation of their sexual relationship and includes a sense of sexual need being fulfilled, meeting individual and sexual partner expectations, and an overall positive evaluation of the sexual relationship (Samadi and Dalir, 2021; Schmiedeberg & Schröder, 2016).

Sexual dysfunction dissatisfaction not only has a negative impact on the relationship, but it is also closely related to social problems such as sexual offenses and crimes, psychological disorders and is considered as one of the reasons for 50% of divorces (Juretić, 2018).

Given the above, this research aims to answer the question whether or not there is a relationship between sexual satisfaction and emotional divorce among Iranian couples.

2. Methods

The present research method is a descriptive correlational study. The statistical population consisted of all couples seeking divorce who referred to family counseling centers under the supervision of the Welfare Organization of Tehran in the second half of 2020. Using convenience-sampling method, 240 individuals were selected as the sample. The researcher visited the aforementioned counseling centers and provided the questionnaires to the couples after explaining the research objectives and obtaining their informed consent. One of the criteria for entering the study was being a divorce applicant, being aware of the research objectives, and giving informed consent to participate in the study. Additionally, the major criteria for exiting the study were suffering from physical or psychological illness that could significantly affect the research objectives.

Instruments

Emotional Divorce Questionnaire: The tool used in the present study is a researcher-made questionnaire that has previously been factor analyzed and its validity and reliability have been confirmed. The scoring method of the questionnaire is a 5-point Likert scale, with a maximum score of 50 and a minimum score of 10. It is worth mentioning that the researcher-made questionnaire consists of three emotional divorce variables with 27 questions and a reliability of 0.920, sexual divorce with 19 questions and a reliability of 0.771, and finally, psychological divorce with 3 questions and a reliability of 0.685.

Glombek-Right Sexual Status Questionnaire (GRISS): This questionnaire has 28 items that was created in 1985 by Right and Glombek. It utilizes a 5-point Likert scale to measure the type and severity of sexual problems in seven areas, with separate forms for men and women. Scores range from zero to four, with a minimum score of zero and a maximum score of 112. The Cronbach's alpha coefficient for the total score of the scale was high, with a value of 0.84 for women and 0.79 for men, indicating strong internal consistency of the questionnaire.

3. Results

Table 1 shows the mean and standard deviation of the variables of emotional divorce and sexual satisfaction.

Table 1

Mean and standard deviation of the variables of emotional divorce and sexual satisfaction

Variables	Mean	Standard Deviation
Emotional divorce	10.85	60.17
Sexual satisfaction	95.73	54.16

Kolmogorov-Smirnov test was used to assess the normality of the data. According to this test, the emotional divorce variable had a test statistic of 32.1 with a significance level of 0.05, indicating a normal distribution. Similarly, the sexual satisfaction variable had a test statistic of 62.1 with a significance level of 0.09, indicating a normal distribution.

Table 2 shows the correlation matrix between emotional divorce and sexual satisfaction variables.

Table 2

Correlation matrix between emotional divorce and sexual satisfaction variables.

Research variable	1	2
1. Emotional divorce	1	
2. Sexual satisfaction	0.53**.	1

**p<0001

The Regression test (INTER) was used to predict emotional divorce based on sexual satisfaction, and the results are presented in Table 3.

Table 3

Results of univariate regression test to predict emotional divorce

Predictive Variables	R	R^2	F	β	sig
Sexual satisfaction	0.55	0.30	17.44	0.44	0.001

As can be seen in Table 3, the significance level of the test is 0.001, which is smaller than the error rate of 0.05 and even 0.01. Therefore, with a confidence level of 99.0%, it can be concluded that the regression model is significant. Based on the results in Table 3, it can be said that sexual satisfaction with a standard beta coefficient (β) of 0.44 can predict 30.0% of the variance in emotional divorce.

4. Discussion

The present study aimed to investigate the relationship between sexual satisfaction and emotional divorce among Iranian couples. The results showed that sexual problems can predict emotional divorce. This finding is consistent with the findings of Akhondi (2017), Belal and Rasool (2020), and Golmohammadi and Alimoradani (2022). In the field of divorce and its growth in modern societies, various researchers have attempted to investigate its causation through different studies. Divorce is a multi-factorial phenomenon in which traces of cognitive factors can be identified as a set of cognitive errors. These cognitive errors manifest in different ways in couples, such as negative interpretations and biases that take different forms of processing. Many couples begin their lives with these defective cognitions, which may not be apparent at the beginning of their married life, and may surface later on as various problems over time. Initial events in married life (such as conditions upon marriage) can make these defective cognitions more apparent and pave the way for marital and familial conflicts.

The more attention and time couples devote to modern lifestyle and prioritizing luxury items, expensive trips, clothing, jewelry, and trendy items, the more possible it becomes for them to distance themselves from their life partner, and with the repetition of this issue, emotional divorce between couples may occur (Scarfí et al., 2016) Lifestyle, as a carrier of specific cultural and social values and meanings, is also a factor and generator of a particular intellectual system, attitude, beliefs, and the scope of its effects will not be limited only to the area of consumption. Rather, it will encompass all aspects of individual and social life, including family. In this regard, one of the most important determining variables of the stability and sustainability of marital life is the attitude towards marriage and divorce, which is itself influenced by lifestyle and its subsequent changes (Abbasi, 2019).

In the discussion of divorce and its growth in modern societies, various researchers have sought to investigate the causality through different studies. Divorce is a multifactorial phenomenon in which traces of cognitive factors can be identified as a set of cognitive errors. These cognitive errors, such as negative interpretations and interpretations, which take on different processing forms, are indicative of the defective cognitions of the couples.

Many couples start their lives with these defective cognitions, and these errors may not be apparent at the beginning of married life. They may only surface in later stages of life and manifest themselves in various problems. The initial events of married life, such as the conditions of the contract, lead to

the apparentness of these defective cognitions and provide the grounds for marital and family conflicts.

The more attention and time couples devote to modern lifestyles and prioritizing luxury goods, expensive trips, clothing and jewelry, and trendy items, the more they distance themselves from their partners. With the repetition of this issue, emotional divorce between couples may occur (Scaffi et al., 2016). Lifestyle, as a carrier of specific cultural and social values and meanings, is also a factor and generator of a particular intellectual system, attitude, beliefs, and convictions that will not be limited to the consumption sector but will also include all personal and social domains of life, including family. In this regard, one of the most important determining variables of the stability and durability of married life is the type of attitude towards marriage and divorce, which is affected by lifestyle and subsequent changes (Abbasi, 2019).

Factors such as neglecting each other's emotions, physical, sexual, and emotional separation can lead to sexual divorce, which destroys positive emotions and feelings between couples and lays the groundwork for emotional divorce. Usually, women do not prioritize having a relationship and how it is, while for some men, achieving sexual satisfaction without considering their spouse's feelings is important to them. These issues gradually lead to sexual and emotional coldness and eventually result in a decrease in intimacy in married life and damage to the sexual relationship, which in the long run can also psychologically separate individuals from each other and lead to unpleasant psychological experiences such as a sense of emptiness, failure, and depression (Biazari et al., 2022). In further explanation of this finding, it can be stated that some sexual problems such as sexual decisiveness weakness are due to ignorance and dysfunctional beliefs and attitudes about sexual relationships. Dysfunctional sexual beliefs, despite being untrue and unsupported by evidence, create expectations that hinder the achievement of spouses' goals and create many conflicts by limiting the ability of couples to communicate. Individuals with negative and dysfunctional sexual schemas have less emotional interaction with their sexual partner and show more avoidance in intimate and emotional relationships (Hedayati Moghadam & Bakhshipour, 1). Dysfunctional sexual beliefs reduce the defective cycle of expectations, self-perception, negative sexual behavior, and performance anxiety and play a very prominent role in reducing intimacy in married life (Ebrahimi & Najafi Pour, Summer 2021).

The consequences of sexual dysfunction are significant issues that affect women at three levels. The first effect of sexual failure is sexual and psychological damage, which includes a range of muscular pain, sorrow, depression, fatigue, etc. Therefore, these women are disrupted in the natural course of life and are usually accompanied by a feeling of dissatisfaction. Some women resort to isolation and silence strategies and do not protest, but this lack of protest leads to the erosion of marital relationships over time. In some cases, this factor leads to conflicts and tensions, and couples are at odds with each

other. Frequent arguments, disrespect towards each other, and a decrease in trust and honesty are among the most important signs of this issue. Additionally, some women with a tendency towards relationships outside of marriage have experienced different forms of relationships. In some cases, these relationships have been at the emotional level, and in some cases, they have led to sexual relationships. The important point in this issue is the primary cause of the formation of marital relationships, which is mostly the fulfillment of emotional needs. Typically, these relationships occur through emotional communication and building trust, and then move towards complete communication (Bahrami & Shakouri, 2023). Sexual self-efficacy can be considered a belief that each individual has about their ability to effectively perform sexual activities and be desirable to their sexual partner. This belief is a form of self-assessment of one's ability and efficacy in sexual behavior and is associated with the level of self-esteem and satisfaction in sexual relationships, as well as feelings of empathy (Rezapour Mirsaleh et al., 2022).

Successful sexual relationships and expressing love and affection increase marital compatibility. Individuals who have higher sexual satisfaction also report a higher quality of life. The role of sexual quality of life in marital satisfaction and happiness is one of the important factors in achieving happiness and satisfaction in life (Abdollahi et al., 2021). The pleasure that individuals derive from satisfying their sexual desires is one of the most important pleasures that humans experience throughout their lives. This sexual pleasure makes many daily problems and marital conflicts overlooked, and as a result, the likelihood of emotional divorce decreases (Mearofi et al., 2021). The control of cultural and religious upbringing of participants, modesty, shyness, and shame in response to questions about sexual satisfaction are the most important intervention variables in the present study. In addition, the research was of a correlational type and data was collected through self-report, so any inferences from the results should be made with caution.

5. Conclusion

In general, the lack of orgasm from women's perspective includes superficial orgasm, feeling sexual pressure, lack of a sense of release, inconsistency with their partner in achieving orgasm, and lack of sexual excitement. Women experience the consequences of sexual failure at three levels: individual, interpersonal, and social. Physical pain, isolation, psychological damage, depression, and lack of pleasure are among the most important consequences. Sexual failure is one of the main and important reasons that drive women towards extramarital relationships, which can lead to significant social damage and attention.

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Conflict of interest

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References

Abbas, I. S. (2019). Social media addiction in romantic relationships: Does user's age influence vulnerability to social media infidelity? Personality and Individual Differences, 139, 277-280. https://doi.org/10.1016/j.paid.2018.10.038

Abdollahi E, Shokrgozar S, Sheerojan M, Golshahi M, Zare R. (2021). Relationship Between Sexual Satisfaction and Mental Health in Married Older Women. *Journal of Guilan University of Medical Sciences, 30* (1), 14-27. http://dx.doi.org/10.32598/JGUMS.30.1.1401.2

Akinwumi, E. (2017). Personality traits and sexual satisfaction as determinants of marital satisfaction among couples in Ibadan. *Gender and Behaviour, 15*(1), 8421-8441. https://www.ajol.info/index.php/gab/article/view/158925

Al Ubaidi BA. (2017). The psychological and emotional stages of divorce. *Journal of Family Medicine and Disease Prevention, 3*(3), 1-4. https://doi.org/10.23937/2469-5793/1510060

Bahrami, L., & Shakeri, T. (2022). The study of perception of Married Women Facing Sexual Failure and Its Consequences. *Journal of Social Work Research, 9*(32), 69-103. https://doi.org/10.22054/rjsw.2023.70385.627

Beizari Kari, F., Heydari, Sh., & Asghari Ganji, A. (2022). Predicting emotional divorce based on early maladaptive schemas in couples with marital problems. *Quarterly Journal of Excellence in Counseling and Psychotherapy, 11*(43), 1-12. https://dorl.net/dor/20.1001.1.25382799.1401.11.43.1.2

Bilal, A., Rasool, S. (2020). Marital Satisfaction and Satisfaction with Life: Mediating Role of Sexual Satisfaction in Married Women. *Journal of Psychosexual Health, 2*(1). https://doi.org/10.1177/2631831820912873

Chau, R. F., Sawyer, W. N., Greenberg, J., Mehl, M. R., Sbarra, D. A. (2021). Emotional recovery following divorce: Will the real self-compassion please stand up? *Journal of Social and Personal Relationships, 39*(4), 996-1022. https://doi.org/10.25384/sage.c.5675714.v1

Dong, S., Dong, Q., Chen, H. (2022). Mothers' parenting stress, depression, marital conflict, and marital satisfaction: The moderating effect of fathers' empathy tendency. *Journal of Affective Disorders, 299*, 682-690. http://dx.doi.org/10.1016/j.jad.2021.12.079

Ebrahimi, L., Najafipoor Tabestanagh, A. (2021). Prevalence of cognitive divorce phenomenon among couples seeking divorce: Review study. *Rooyesh, 10* (6), 199-210. http://frooyesh.ir/article-1-2694-en.html

Forouzanfar, A., Sayadi, M. (2019). Meta-analysis of the effectiveness of emotionally focused therapy on reducing marital problems. *Armaghan-e-Danesh, 24*(1), 97-109. http://dx.doi.org/10.52547/armaghanj.24.1.97

Gao, T., Meng, X., Qin, Z., Zhang, H., Gao, J., Kong, Y., Hu, Y., Mei, S. (2018). Association

between parental marital conflict and Internet addiction: A moderated mediation analysis. *Journal of Affective Disorders, 240*, 27-32. https://doi.org/10.1016/j.jad.2018.07.005

Gol Mohammadi, H, Ali Mardani Mohammad, J. (2022). Investigating the prediction of emotional divorce based on couples' sexual issues. *Assessment and research in applied counseling, 4* (3), 32-37. http://dx.doi.org/10.52547/jarac.4.4.79

Hedayati Moghadam, S., & Bakshipour, A. (2022). The effectiveness of emotional schema therapy on emotional divorce and emotional maturity of couples seeking divorce in Babol city. *Counseling and Psychotherapy Quarterly*, *11*(42), 36-44. https://dorl.net/dor/20.1001.1.25382799.1401.11.42.4.3

Horwitz, A., Helen, R., Sandra, H. W. (2019). Becoming Married and Mental Health: A Longitudinal Study Of A Scohort Of Young Adults. *Journal of Marriage and the family therapy*, *58*(6), 895-907. https://doi.org/10.2307/353978

Jahandar Lashki, S., Sadat Hosseini, S., & Kakabaraei, K. (2020). Thee Causal Model of the Relationship between Tendency to Marital Infidelity and Media Use Mediated by Dysfunctional Attitudes and Emotional Divorce. *The Women and Families Cultural-Educational*, *15*(51), 71-90. https://dorl.net/dor/20.1001.1.26454955.1399.15.51.4.5

Jarwan, A. S. & Al-frehat, B. M. (2020). Emotional Divorce and Its Relationship with Psychological Hardiness. *International Journal of Education and Practice, 8*(1), 72-85. https://ideas.repec.org/a/pkp/ijoeap/v8y2020i1p72-85id626.html

Juretić, J. (2018). Quality of close relationships and emotional regulation regarding social anxiety. *Psychiatria Danubina, 30*(4), 441-451. DOI: 10.24869/psyd.2018.441

Maroofi, B., rahimi, M., Fathi, L., & Afrasiabi, F. (2021). Social and Cultural Factors Affecting the Tendency Toward Emotional Divorce (Case Study: Couples Referring to Counseling Centers in Tehran). *Quarterly Journal of Woman and Society*, *12*(45), 179-194. https://doi.org/10.30495/jzvj.2021.4573

Rasheed, A., Amr, A., Fahad, N. (2021). Investigating the relationship between emotional divorce, marital expectations, and self-efficacy among wives in Saudi Arabia. Journal of Divorce & Remarriage, 62(1), 19-40. https://doi.org/10.1080/10502556.2020.1833290

Rezapour Mirsaleh, Y., mosayebi, M., Khandaghi, Z., & Nazemi, B. (2022). Identifying and Ranking the Factors Affecting Early Marital Conflicts in Newly Married Couples with Interpretive Structural Modeling (ISM) Approach. *Journal of Family Research, 17*(4), 541-560. https://doi.org/10.52547/JFR.17.4.541

Samadi, F., & Dalir, M. (2021). The Role of psychological and social health on sexual health of elderly women. *Social Psychology Research, 10*(40), 21-42. https://doi.org/10.22034/spr.2021.127712

Schmiedeberg, C., Schröder, J. (2016). Does sexual satisfaction change with relationship duration? *Archives of Sexual Behavior, 45*(1), 99-107. https://doi.org/10.1007/s10508-015-0587-0

Rust, J., & Golombok, S. (1985). The Golombok-Rust inventory of sexual satisfaction (GRISS). *British Journal of Clinical Psychology, 24*(1),

63-64. https://doi.org/10.1111/j.2044-8260.1985.tb01314.x

Scaffi, M., & Masoudi, H. (2016). The Effect of Social Order of Wisdom in the Family on the Underlying Measures of Divorce Due to Conflict Case Study: Shahed Mashhad's Children. *Khorasan Cultural and Social Studies, 11*(1), 63-84. https://dorl.net/dor/20.1001.1.26766116.1395.11.1.4.2

Shirmohammadi, F., Elahi, T., & Ebrahimi, L. (2021). The Effectiveness of Emotional Self-Control Training on Managing Interpersonal Conflicts and Problem-Solving Strategies Among Women with Marital Problems. *Journal of Applied Psychology*, *15*(2), 271-249. https://doi.org/10.52547/apsy.2021.221409.1025

Simonič, B., & Klobučar, N. R. (2017). Experiencing positive religious coping in the process of divorce: a qualitative study. *Journal of religion and health*, *56*(5), 1644-1654. https://doi.org/10.1007/s10943-016-0230-y