



Comparing the effectiveness of Acceptance and Commitment Therapy (ACT) and Compassion Focused Therapy (CFT) on tension headaches and blood pressure in women with somatic symptom disorder

Sara. Sadeghi Nisiani¹

Mohammad Hassan. Ghanifar^{2*}

Fatemeh. Shahbazizadeh³

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

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

3. Associate Professor of Psychology Department, Birjand Branch, Islamic Azad University, Birjand, Iran

Email: ghanifar@iaubir.ac.ir

Received: 09.03.2022

Acceptance: 12.12.2022

Journal of
Applied Family Therapy

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

Vol. 3, No. 5, Pp: 405-424
Winter 2023 Special Issue

Original research article

How to Cite This Article:

Kalantari, M., Sotoudeh, S., Dehghan Banadaki, M., & Arbakri, F. (2023). Comparing the effectiveness of Acceptance and Commitment Therapy (ACT) and Compassion Focused Therapy (CFT) on tension headaches and blood pressure in women with somatic symptom disorder. *aftj*, 3(5): 405-424.



© 2023 by the authors. Licensee Iranian Association of Women's Studies, Tehran, Iran. This article is an open access article distributed under the terms and conditions of

Abstract

Aim: The purpose of this study was to compare the effectiveness of Acceptance and Commitment Therapy (ACT) and Compassion Focused Therapy (CFT) on tension headaches and blood pressure in patients with physical symptoms disorder. **Methods:** This was a quasi-experimental study with a pre-test, post-test and follow-up design with a witness group. The statistical population of the research included all women with physical symptoms disorder who referred to Sara counseling centers and Imam Zaman (AS) Helping Association in Isfahan city in the first half of 2021. And then, justifying the objectives of the research and having the consent to participate in the research, they were randomly placed in two experimental and control groups. The data were obtained using headache questionnaire and blood pressure measurement and were analyzed by repeated measurement analysis method and SPSS software. **Results:** The results showed that the treatment based on acceptance and commitment (ACT) was effective on tension headaches, systolic blood pressure and diastolic blood pressure ($p < 0.05$). But compassion-focused therapy (CFT) was effective only on tension headaches ($p < 0.05$). There was no significant difference between the two groups in terms of tension headaches ($p < 0.05$). But the effect of Acceptance and Commitment Therapy (ACT) was greater than Compassion Focused Therapy (CFT) in systolic and diastolic blood pressure. **Conclusion:** It can be concluded that the treatment based on acceptance and commitment had a greater effect compared to the treatment focused on compassion in the blood pressure of women with physical symptoms disorder and it can be considered as a suitable approach to improve the problems of these patients.

Keywords: acceptance and commitment therapy, compassion-focused therapy, tension headache, blood pressure, somatic symptom disorder.

References

- American Psychiatric Association, A. P., & American Psychiatric Association. (2013). diagnostic and statistical manual of mental disorders: DSM-5.
- Amirkhanlou, A., Mirzaian, B., & Hassanzadeh, R. (2021). Comparison of acceptance and commitment-based therapy and dialectical behavior therapy on interpersonal forgiveness and distress tolerance in women abused by domestic violence. *Roish Journal of Psychology*, 4(10): 1-10.
- Andersen, L. S., Grimsrud, A., Myer, L., Williams, D. R., Stein, D. J., & Seedat, S. (2011). The psychometric properties of the K10 and K6 scales in screening for mood and anxiety disorders in the South African Stress and Health study. *International Journal of Methods in Psychiatric Research*, 20(4), 215-223.
- Ashina, S., Mitsikostas, D. D., Lee, M. J., Yamani, N., Wang, S. J., Messina, R., ... & Lipton, R. B. (2021). Tension-type headache. *Nature Reviews Disease Primers*, 7(1), 1-21.
- A-tjak, J. G., Davis, M. L., Morina, N., Powers, M. B., Smits, J. A., & Emmelkamp, P. M. (2015). A meta-analysis of the efficacy of acceptance and commitment therapy for clinically relevant mental and physical health problems. *Psychotherapy and psychosomatics*, 84(1), 30-36.
- Azari, V., Kazemian Moghadam, K., & Mehrabizadeh Honarmand, M. (2020). The effectiveness of compassion-based therapy on self-suppression and emotional intimacy of women seeking divorce. *Bi-quarterly Journal of Family Psychology*. 7 (1): 81-92.
- Babakhani, V. (2020). The effectiveness of acceptance and commitment therapy (ACT) on distress tolerance and self-control of betrayed women. *Bi-quarterly Journal of Family Psychology*. 7 (1): 121-132.
- Behundi, N., Khayatan, F., & Golparvar, M. (2021). Comparing the efficacy of compassion-based emotion-oriented integrated therapy with compassion-based therapy on perfectionism and intolerance of uncertainty in patients with primary headache symptoms. *Scientific-Research Quarterly of Psychological Methods and Models*. 12(43): 114-130.
- Bronsi, F., Golmakani, Z. B., Mansouri, A., & Del, A. Z. (2020). The effectiveness of compassion focused therapy on distress tolerance, difficulty in emotion regulation and anxiety sensitivity in patients with cardiovascular disease. *Social Determinants of Health*, 6, e16-e16.
- Budtz-Lilly, A., Schröder, A., Rask, M. T., Fink, P., Vestergaard, M., & Rosendal, M. (2015). Bodily distress syndrome: A new diagnosis for functional disorders in primary care?. *BMC family practice*, 16(1), 1-10.
- Burian, H., Böge, K., Burian, R., Burns, A., Nguyen, M. H., Ohse, L., ... & Diefenbacher, A. (2021). Acceptance and commitment-based therapy for patients with psychiatric and physical health conditions in routine general hospital care—Development, implementation and outcomes. *Journal of Psychosomatic Research*, 143, 110374.
- Burton, C., Fink, P., Henningsen, P., Löwe, B., & Rief, W. (2020). Functional somatic disorders: discussion paper for a new common classification for research and clinical use. *Bmc Medicine*, 18(1), 1-7.
- Canales, G. D. L. T., Guarda-Nardini, L., Rizzatti-Barbosa, C. M., Conti, P. C. R., & Manfredini, D. (2019). Distribution of depression, somatization and pain-related impairment in patients with chronic temporomandibular disorders. *Journal of Applied Oral Science*, 27.
- Carvalho, S. A., Trindade, I. A., Duarte, J., Menezes, P., Patrão, B., Nogueira, M. R., ... & Castilho, P. (2021). Efficacy of an ACT and compassion-based eHealth program for self-management of chronic pain (iACTwithPain): Study protocol for a randomized controlled trial. *Frontiers in Psychology*, 12.
- Ebrahimi, A., Molavi, H., Mousavi, Gh, Bornamanesh, A. R., Yaghoubi, M. (2007). Psychometric properties, factor structure, clinical cut-off point, sensitivity and specificity of the 28-item General Health Questionnaire (GHQ-28) in Iranian patients with psychiatric disorders. *Journal of Behavioral Science Research*. 5(1):1-11.

- Fink, P., & Schröder, A. (2010). One single diagnosis, bodily distress syndrome, succeeded to capture 10 diagnostic categories of functional somatic syndromes and somatoform disorders. *Journal of psychosomatic research*, 68(5), 415-426.
- Fledderus, M., Bohlmeijer, E. T., Pieterse, M. E., & Schreurs, K. M. G. (2012). Acceptance and commitment therapy as guided self-help for psychological distress and positive mental health: a randomized controlled trial. *Psychological medicine*, 42(3), 485-495.
- Fuchs, F. D., & Whelton, P. K. (2020). High blood pressure and cardiovascular disease. *Hypertension*, 75(2), 285-292.
- Garcia, M. (2021). ONLINE ACCEPTANCE AND COMMITMENT THERAPY FOR CHRONIC PAIN IN A SAMPLE OF PEOPLE WITH CHIARI MALFORMATION: A PILOT STUDY (Doctoral dissertation, Kent State University).
- Ghogare, A. S., & Patil, P. S. (2020). A cross-sectional study of co-morbid generalized anxiety disorder and major depressive disorder in patients with tension-type headache attending tertiary health care centre in central rural India. *Nigerian Postgraduate Medical Journal*, 27(3), 224.
- Gilbert, P. (2009). Introducing compassion-focused therapy. *Advances in psychiatric treatment*, 15(3), 199-208.
- Gilbert, P. (2010). An introduction to compassion focused therapy in cognitive behavior therapy. *International Journal of Cognitive Therapy*, 3(2), 97-112.
- Gilbert, P. (2014). The origins and nature of compassion focused therapy. *British Journal of Clinical Psychology*, 53(1), 6-41.
- Griner, D., Beecher, M. E., Burlingame, G. M., Erekson, D. M., & Cattani, K. (2022). Compassion focused therapy in groups. In *Compassion focused therapy* (pp. 413-426). Routledge.
- Grover, M., Kolla, B. P., Pamarthy, R., Mansukhani, M. P., Breen-Lyles, M., He, J. P., & Merikangas, K. R. (2021). Psychological, physical, and sleep comorbidities and functional impairment in irritable bowel syndrome: Results from a national survey of US adults. *PloS one*, 16(1), e0245323.
- Haddadi, S., Malihi al-Zhakereyni, S., Taj Bakhsh, R., Tajvidi, M., & Kakavand, A. (2021). Comparing the effectiveness of treatment based on commitment and acceptance and metacognitive therapy on blood pressure in patients undergoing hemodialysis. *Journal of Qom University of Medical Sciences*. 15(1): 10-19.
- Hayes, S. C. (2004). Acceptance and commitment therapy, relational frame theory, and the third wave of behavioral and cognitive therapies. *Behavior therapy*, 35(4), 639-665
- Hayes, S. C. (2005). *Get out of your mind and into your life: The new acceptance and commitment therapy*. New Harbinger Publications
- Hayes, S. C., Strosahl, K. D., & Wilson, K. G. (2009). *Acceptance and commitment therapy*. Washington, DC: American Psychological Association
- Hayes, S. C., Strosahl, K. D., Bunting, K., Twohig, M., & Wilson, K. G. (2004). What is acceptance and commitment therapy?. In *A practical guide to acceptance and commitment therapy* (pp. 3-29). Springer, Boston, MA.
- Henningsen, P., Zipfel, S., & Herzog, W. (2007). Management of functional somatic syndromes. *The Lancet*, 369(9565), 946-955.
- Hinton, T. C., Adams, Z. H., Baker, R. P., Hope, K. A., Paton, J. F., Hart, E. C., & Nightingale, A. K. (2020). Investigation and treatment of high blood pressure in young people: too much medicine or appropriate risk reduction?. *Hypertension*, 75(1), 16-22.
- Hosseinaee, A., Ahadi, H., Fathi, L., Heydari, A., Mazaheri, M. M. (2013). The effect of group training based on acceptance and commitment therapy on occupational stress and burnout. *Iranian Journal of Psychiatry and Clinical Psychology*. 19 (2): 109-120.
- Hudson, M. P., Thompson, A. R., & Emerson, L. M. (2020). Compassion-focused self-help for psychological distress associated with skin conditions: a randomized feasibility trial. *Psychology & health*, 35(9), 1095-1114.
- Hung, C. I., Liu, C. Y., & Yang, C. H. (2019). Persistent depressive disorder has long-term negative impacts on depression, anxiety, and somatic symptoms at 10-year follow-up

- among patients with major depressive disorder. *Journal of affective disorders*, 243, 255-261.
- Iran Dost, F., Safari, S., Taher Neshat Dost, H., & Nadi, M. A. (2015). The effectiveness of group therapy based on acceptance and commitment on pain-related anxiety and depression in women with chronic back pain. *International Journal of Behavioral Sciences*, 9(1): 1-11.
- Izadi, R., & Abedi, M. R. (2014). *Acceptance and Commitment Therapy*. second round, Tehran; Jangal Publication.
- Jaracz, J., Gattner, K., Jaracz, K., & Górna, K. (2016). Unexplained painful physical symptoms in patients with major depressive disorder: prevalence, pathophysiology and management. *CNS drugs*, 30(4), 293-304.
- Kaovoosian, J., Harifari, H., & Karimi, K. (2017). The effectiveness of Acceptance and Commitment Therapy (ACT) on couples' marital satisfaction. *Health and care magazine*. 19 (1): 75-87.
- Keshavarz Afshar, H., Rafei, Z., & Mirzaei, A. (2017). The effectiveness of acceptance and commitment therapy on generalized anxiety. *his foot* 17 (3):289-296.
- Khanam, F., Sharma, M. P., & Chaturvedi, S. K. (2019). Acceptance and Commitment Therapy in Patients with Somatic Symptom Disorder: A Case Series. *Indian journal of clinical psychology*, 46(1), 46-51.
- Kurlansik, S. L., & Maffei, M. S. (2016). Somatic symptom disorder. *American family physician*, 93(1), 49-54.
- Levine, G. N., Cohen, B. E., Commodore-Mensah, Y., Fleury, J., Huffman, J. C., Khalid, U., ... & American Heart Association Council on Clinical Cardiology; Council on Arteriosclerosis, Thrombosis and Vascular Biology; Council on Cardiovascular and Stroke Nursing; and Council on Lifestyle and Cardiometabolic Health. (2021). Psychological health, well-being, and the mind-heart-body connection: a scientific statement from the American Heart Association. *Circulation*, 143(10), e763-e783.
- Luo, D., Cheng, Y., Zhang, H., Ba, M., Chen, P., Li, H., ... & Chen, H. (2020). Association between high blood pressure and long term cardiovascular events in young adults: systematic review and meta-analysis. *bmj*, 370.
- Malmberg-Ceder, K., Soynila, S., Korhonen, P. E., Kautiainen, H., & Haanpää, M. (2021). Headache and quality of life in Finnish female municipal employees. *Scandinavian journal of pain*.
- Maratos, F. A., & Sheffield, D. (2020). Brief Compassion-Focused Imagery Dampens Physiological Pain Responses. *Mindfulness*, 11(12), 2730-2740.
- Mark, G., & Smith, A. P. (2018). Coping and its relation to gender, anxiety, depression, fatigue, cognitive difficulties and somatic symptoms. *Journal of Education, Society and Behavioural Science*, 1-22
- McGinty, E. E., Presskreischer, R., Han, H., & Barry, C. L. (2020). Psychological distress and loneliness reported by US adults in 2018 and April 2020. *Jama*, 324(1), 93-94.
- Meena, P. S., Sharma, A., & Jain, M. (2022). Gender differences in somatic symptoms in patients with depression: A comparative study at tertiary care center in North India. *Indian Journal of Social Psychiatry*, 38(1), 69.
- Midenfjord, I., Borg, A., Törnblom, H., & Simrén, M. (2021). Cumulative effect of psychological alterations on gastrointestinal symptom severity in irritable bowel syndrome. *Official journal of the American College of Gastroenterology| ACG*, 116(4), 769-779.
- Molander, P., Hesser, H., Weineland, S., Bergwall, K., Buck, S., Jäder Malmlöf, J., ... & Andersson, G. (2018). Internet-based acceptance and commitment therapy for psychological distress experienced by people with hearing problems: A pilot randomized controlled trial. *Cognitive Behaviour Therapy*, 47(2), 169-184.
- Narimani, M., & Taheri Fard, M. (2019). The effectiveness of education based on acceptance and commitment on reducing experiential avoidance and psychological distress of

- adolescents with specific learning disabilities. *Learning Disabilities Quarterly*, 4(8): 110-133.
- Nazarova, J. (2021). Functional Cardiopathy Syndrome In Modern Adolescents. *The American Journal of Medical Sciences and Pharmaceutical Research*, 3(01), 6-11
- Neff, K. (2003). Self-compassion: An alternative conceptualization of a healthy attitude toward oneself. *Self and identity*, 2(2), 85-101.
- Petrova, M. M., Moskaleva, P. V., Shnayder, N. A., & Nasyrova, R. F. (2020). Comorbidity of arterial hypertension and tension-type headache. *Kardiologiya*, 60(10), 132-140.
- Rahnama, M., Sajjadian, E., & Raofi, A. (2017). The effectiveness of treatment based on acceptance and commitment on psychological distress and treatment compliance of coronary heart patients. *Journal of Psychiatric Nursing*, 5(4): 43-34.
- Rastogi, R., Singhal, P., Chaturvedi, D. K., & Gupta, M. (2021). Investigating Correlation of Tension-Type Headache and Diabetes: IoT Perspective in Health care. In *Internet of Things for Healthcare Technologies* (pp. 71-91). Springer, Singapore.
- Rathi, N., Kazi, S., Shaikh, A. G., Kumar, J., Maheshwari, J., Rathi, M. K., & Rathi, K. K. (2021). PERCEPTION OF HEADACHE IS INTERLINKED WITH HIGH BLOOD PRESSURE: A POPULATION BASED MULTICENTER PROSPECTIVE STUDY. *Journal of Peoples University of Medical & Health Sciences Nawabshah.(JPUMHS)*, 11(1), 80-83.
- Renoir, T., Hasebe, K., & Gray, L. (2013). Mind and body: how the health of the body impacts on neuropsychiatry. *Frontiers in Pharmacology*, 4, 158.
- Roenneberg, C., Sattel, H., Schaefer, R., Henningsen, P., & Hausteiner-Wiehle, C. (2019). Functional somatic symptoms. *Deutsches Ärzteblatt International*, 116(33-34), 553.
- Rometsch, C., Denking, J. K., Engelhardt, M., Windthorst, P., Graf, J., Gibbons, N., ... & Junne, F. (2020). Pain, somatic complaints, and subjective concepts of illness in traumatized female refugees who experienced extreme violence by the “Islamic State”(IS). *Journal of psychosomatic research*, 130, 109931.
- Roslyakova, T., Falco, M. A., & Gauchet, A. (2021). An exploratory clinical trial on acceptance and commitment therapy as an adjunct to psychoeducational relaxation therapy for chronic pain. *Psychology & Health*, 36(12), 1403-1426.
- Saarin, A. I., Keltikangas-Järvinen, L., Hints, T., Pulkki-Råback, L., Ravaja, N., Lehtimäki, T., ... & Hintsanen, M. (2020). Does compassion predict blood pressure and hypertension? The modifying role of familial risk for hypertension. *International journal of behavioral medicine*, 27(5), 527-538.
- Salimi, A., Arslan Deh, F., Zaharakar, K., Davarnia, R., & Shakarami, M. (2018). The effectiveness of compassion-focused therapy on the mental health of women with multiple sclerosis. *horizon of knowledge* 24 (2): 131-125.
- Sander, A. M., Clark, A. N., Arciniegas, D. B., Tran, K., Leon-Novelo, L., Ngan, E., ... & Walsler, R. (2021). A randomized controlled trial of acceptance and commitment therapy for psychological distress among persons with traumatic brain injury. *Neuropsychological rehabilitation*, 31(7), 1105-1129.
- Schröder, A., Ørnboel, E., Jensen, J. S., Sharpe, M., & Fink, P. (2017). Long-term economic evaluation of cognitive-behavioural group treatment versus enhanced usual care for functional somatic syndromes. *Journal of Psychosomatic Research*, 94, 73-81.
- Shakerenjad, S., Moazen, N., Hamidi, M., Hashemi, R., Bazazzadeh, N., & Badaghi, M. (2017). The effectiveness of treatment based on acceptance and commitment on psychological distress, marital satisfaction and quality of life in women with multiple sclerosis. *Health and care magazine*. 19(1): 7-17.
- Sharifian, N., Spivey, B. N., Zaheed, A. B., & Zahodne, L. B. (2020). Psychological distress links perceived neighborhood characteristics to longitudinal trajectories of cognitive health in older adulthood. *Social Science & Medicine*, 258, 113125.
- Shen, F., Liu, Y., & Brat, M. (2021). Attachment, Self-Esteem, and Psychological Distress: A Multiple-Mediator Model. *Professional Counselor*, 11(2), 129-142.
- Sheydaei Aghdam, Sh., Shamsodini, S., Abbasi, S., Yousefi, S., Abdullahi, S., & Moradijo, M. (2014). The effectiveness of treatment based on acceptance and commitment on reducing

- distress and dysfunctional attitudes in patients with multiple sclerosis. *Quarterly Journal of Thought and Behavior in Clinical Psychology*, 9(34): 66-57.
- Shiha, M. G., Asghar, Z., Thoufeeq, M. O., Kurien, M., Ball, A. J., Rej, A., ... & Aziz, I. (2021). Increased psychological distress and somatization in patients with irritable bowel syndrome compared with functional diarrhea or functional constipation, based on Rome IV criteria. *Neurogastroenterology & Motility*, 33(10), e14121.
- Song, T. J., Cho, S. J., Kim, W. J., Yang, K. I., Yun, C. H., & Chu, M. K. (2016). Anxiety and depression in tension-type headache: a population-based study. *PloS one*, 11(10), e0165316.
- Taghavi, S. M. (2001). Checking the validity and reliability of the general health questionnaire. *Journal of psychology*, 5(4): 381-394.
- Taherpour, M., Sohrabi, A., Zemestani, M. (2019). The effectiveness of compassion-focused therapy on symptoms of depression, anxiety, stress, and weight self-efficacy in people with eating disorders. *Scientific-research journal of Sabzevar University of Medical Sciences*, 26(4): 505-513.
- Thurston, R. C., Fritz, M. M., Chang, Y., Barinas Mitchell, E., & Maki, P. M. (2021). Self-compassion and subclinical cardiovascular disease among midlife women. *Health Psychology*, 40(11), 747.
- Vasiliadis, H. M., Chudzinski, V., Gontijo-Guerra, S., & Prévile, M. (2015). Screening instruments for a population of older adults: The 10-item Kessler Psychological Distress Scale (K10) and the 7-item Generalized Anxiety Disorder Scale (GAD-7). *Psychiatry research*, 228(1), 89-94.
- Wang, S., Zhang, Y., Ding, W., Meng, Y., Hu, H., Liu, Z., ... & Wang, M. (2020). Psychological distress and sleep problems when people are under interpersonal isolation during an epidemic: a nationwide multicenter cross-sectional study. *European Psychiatry*, 63(1).
- Westerman, G., McCann, E., & Sparkes, E. (2020). Evaluating the effectiveness of mindfulness and compassion-based programs on shame and associated psychological distress with potential issues of salience for adult survivors of childhood sexual abuse: a systematic review. *Mindfulness*, 1-21.
- Yaqoubi, H. (2015). Psychometric characteristics of the 10-question version of Kessler's Psychological Distress Questionnaire (10-k). *Quarterly Journal of Applied Psychological Research*, 6(4): 45-57.
- Zhang, C. Q., Leeming, E., Smith, P., Chung, P. K., Hagger, M. S., & Hayes, S. C. (2018). Acceptance and commitment therapy for health behavior change: a contextually-driven approach. *Frontiers in psychology*, 8, 2350.
- Zhang, M., Zhang, J., Zhang, F., Zhang, L., & Feng, D. (2018). Prevalence of psychological distress and the effects of resilience and perceived social support among Chinese college students: Does gender make a difference?. *Psychiatry research*, 267, 409-413.
- Zhang, Y., Zhou, C., Huang, Z., & Ye, X. (2021). Study of cuffless blood pressure estimation method based on multiple physiological parameters. *Physiological Measurement*, 42(5), 055004.