

Occupational Therapy's Role in the Restoration of Occupational Balance Following Disaster

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Presented in Partial Fulfillment of the Master of Science in Occupational Therapy degree at Thomas Jefferson University

PICO: What interventions within the scope of occupational therapy practice are effective in supporting occupational rebalance among individuals who experience psychological trauma due to disaster?

Methods:

- Databases searched: PubMed, Scopus, CINAHL
- Search Terms:
 - **P:** Psychological trauma, traumatic stress disorder, trauma and stressor related disorders, natural disaster, terrorism, mass casualty incident, pandemic, epidemic
 - **I:** Occupational therapy, mental health rehabilitation, psychiatric rehabilitation, psychosocial rehabilitation, cognitive behavioral therapy, stress reduction
 - **O:** Occupational balance/rebalance, quality of life, life balance, mental health recovery, coping skills, stress
- Evaluation of Literature: Each researcher reviewed 5-6 articles using the Quantitative or Qualitative Critical Review Form.
- Total number of articles: Initial search = 2,456; After title, abstract and full text screen = 16

Themes:

- Theme 1: Trauma-Informed Care (TIC)
 - Subtheme 1: Building Resilience
 - Subtheme 2: Psychoeducation
- Theme 2: Intervention Delivery Methods
 - Subtheme 1: Timing of Intervention (immediate vs. delayed treatment)
 - Subtheme 2: Setting (school vs. community)
 - Subtheme 3: Format (group vs. individual)
- Theme 3: Culturally Tailored Interventions

Results:

- Moderate evidence supports the use of trauma-informed care incorporating psychoeducation and resilience-building to reduce conditions associated with psychological trauma (PTSD, anxiety, depression); A multimodal approach is effective
- Interventions are effective regardless of format (group vs individual) and timing in relation to the disaster. Low-strength evidence for the most appropriate/effective setting for interventions indicating need for further research in this area
- Moderate-strength evidence for effectiveness of culturally tailored intervention to address psychological trauma due to disaster. Important to note low level of articles with this consideration (n=4)

References

1. Scaffa, M., Reitz, S., Smith, T., & DeLany, J. (2011). The role of occupational therapy in disaster preparedness, response, and recovery. *American Journal of Occupational Therapy*, 65(6), S11-S25. <https://doi.org/10.5014/ajot.2011.65S11>
2. Solomon, E. P., & Heide, K. M. (1999). Type iii trauma: Toward a more effective conceptualization of psychological trauma. *International Journal of Offender Therapy and Comparative Criminology*, 43(2), 202-210. <https://doi.org/10.1177/0306624x99432007>
3. Wagman, P., Håkansson, C., & Björklund, A. (2011). Occupational balance as used in occupational therapy: A concept analysis. *Scandinavian Journal of Occupational Therapy*, 19(4), 322-327. <https://doi.org/10.3109/11038128.2011.596219>
4. Parente, M., Tofani, M., De Santis, R., Esposito, G., Santilli, V., & Galeoto, G. (2017). The role of the occupational therapist in disaster areas: Systematic review. *Occupational Therapy International*, 2017, 1-8. <https://doi.org/10.1155/2017/6474761>
5. Goldmann, E., & Galea, S. (2014). Mental health consequences of disasters. *Annual Review of Public Health*, 35(1), 169-183. doi:10.1146/annurev-publhealth-032013-182435
6. *Number of people affected by natural disasters*. (2020). Our World in Data. <https://ourworldindata.org/grapher/number-affected-by-natural-disasters?country=Drought~All%2Bnatural%2Bdisasters>

7. Fette, C., Lambdin-Pattavina, C., & Weaver, L. (2019). *Understanding and applying trauma-informed approaches across occupational therapy settings*. AOTA.
<https://www.aota.org/-/media/Corporate/Files/Publications/CE-Articles/CE-Article-May-2019-Trauma.pdf>
8. *Occupational therapy's role with Post Traumatic Stress Disorder*. American Occupational Therapy Association.
<https://www.aota.org/-/media/Corporate/Files/AboutOT/Professionals/WhatIsOT/MH/Facts/PTSD%20fact%20sheet.pdf>
9. American Occupational Therapy Association. (2020). Occupational therapy practice framework: Domain and process (4th ed.). *American Journal of Occupational Therapy*, 74(Suppl. 2), 7412410010. <https://doi.org/10.5014/ajot.2020.74S2001>
10. Law, M., Stewart, D., Pollock, N., Letts, L & Bosch, J. (2014). Quantitative review form and guidelines. In Law, M. & MacDermid, J. (Eds). *Evidence-based rehabilitation: A guide to practice*, Third edition. (pp.375-389). Thorofare, NJ: Slack Incorporated.
11. Letts, L., Wilkins, S., Law, M, Stewart, D., Bosch, J. & Westmorland, M. (2014). Qualitative review form and guidelines. In Law, M. & MacDermid, J. (Eds). *Evidence-based rehabilitation: A guide to practice*, Third edition. (pp.357-374). Thorofare, NJ: Slack Incorporated
12. University of Oxford (2009, March). *Oxford centre for evidence-based medicine: Levels of evidence*. Center for Evidence Based Medicine.
<https://www.cebm.ox.ac.uk/resources/levels-of-evidence/oxford-centre-for-evidence-based-medicine-levels-of-evidence-march-2009>
13. Betancourt, T. S., McBain, R., Newnham, E. A., Akinsulure-Smith, A. M. Brennan, R. T., Weiss, J. R., & Hansen, N. B. (2014). A behavioral intervention for war-affected youth in Sierra Leone: A randomized controlled trial. *Journal of the American Academy of Child & Adolescent Psychiatry.*, 53(12), 1288–1297. <https://doi.org/10.1016/j.jaac.2014.09.011>
14. Berger, R., Pat-Horenczyk, R., & Gelkopf, M. (2007). School-based intervention for prevention and treatment of elementary-students' terror-related distress in Israel: A quasi-randomized controlled trial. *Journal of Traumatic Stress*, 20(4), 541–551. <http://dx.doi.org/10.1002/jts.20225>
15. Berger, R. & Gelkopf, M. (2009). School-based intervention for the treatment of tsunami-related distress in children: A quasi-randomized controlled trial. *Psychotherapy and Psychosomatics*, 78, 364-371. <http://doi.org/10.1159/000235976>
16. Brown, E. J., Goodman, R. F., Cohen, J. A., Mannarino, A. P., & Chaplin, W. F. (2019). An exploratory trial of cognitive-behavioral vs client-centered therapies for child-mother dyads bereaved from terrorism. *Journal of Child & Adolescent Trauma*, 13(1), 113–125. <https://doi.org/10.1007/s40653-019-00264-2>
17. Child and Adolescent Trauma Treatments and Services Consortium (2020). Implementation of CBT for youth affected by the World Trade Center disaster: Matching need to treatment intensity and reducing trauma symptoms. *Journal of Traumatic Stress*, 23(6), 699–707. <http://dx.doi.org/10.1002/jts.20594>
18. Chen, Y., Shen, W. W., Gao, K., Lam, C. S., Chang, W. C., & Deng, H. (2014). Effectiveness RCT of a CBT intervention for youths who lost parents in the Sichuan, China earthquake. *Psychiatric Services*, 65(2), 259–262.
<https://doi.org/10.1176/appi.ps.201200470>
19. Jaycox, L. H., Cohen, J. A., Mannarino, A. P., Walker, D. W., Langley, A. K., Gegenheimer, K. L., ... & Schonlau, M. (2010). Children's mental health care following Hurricane Katrina: A field trial of trauma-focused psychotherapies. *Journal of Traumatic Stress: Official Publication of The International Society for Traumatic Stress Studies*, 23(2), 223-231.
20. Shooshtary, M. H., Panaghi, L., & Moghadam, J. A. (2008). Outcome of cognitive behavioral therapy in adolescents after natural disaster. *Journal of Adolescent Health*, 42(5), 466-472. doi:10.1016/j.jadohealth.2007.09.011
21. Sonderegger, R., Rombouts, S., Ocen, B., & McKeever, R. S. (2011). Trauma rehabilitation for war-affected persons in northern Uganda: A pilot evaluation of the EMPOWER programme. *British Journal of Clinical Psychology*, 50(3), 234-249. doi:10.1348/014466510x511637
22. Leor, A., Dolberg, O. T., Eshel, S. P., Yagil, Y., & Schreiber, S. (2013). Trauma-focused early intensive cognitive behavioral intervention (TF-EICBI) in children and adolescent survivors of suicide bombing attacks (SBAs). A preliminary study. *American Journal of Disaster Medicine*, 8(4), 227-234.
23. Giannopoulou, I., Dikaiakou, A., & Yule, W. (2006). Cognitive-behavioural group intervention for PTSD symptoms in children following the Athens 1999 earthquake: A pilot study. *Clinical child psychology and psychiatry*, 11(4), 543-553.
24. Hamblen, J. L., Norris, F. H., Pietruszkiewicz, S., Gibson, L. E., Naturale, A., & Louis, C. (2009). Cognitive behavioral therapy for postdisaster distress: A community based treatment program for survivors of Hurricane Katrina. *Administration and Policy in Mental Health and Mental Health Services Research*, 36(3), 206-214.
25. Ito, D., Koseki, S., & Ohtani, T. (2016). A brief school-based cognitive-behavioral intervention for Japanese adolescents with

- severe posttraumatic stress. *Journal of traumatic stress*, 29(6), 577-580.
26. Rønholt, S., Karsberg, S., & Elklit, A. (2013). Preliminary evidence for a classroom based psychosocial intervention for disaster exposed children with posttraumatic stress symptomatology. *Child & Youth Care Forum*, 42(6), 617-631. doi:10.1007/s10566-013-9220-3
 27. Sezibera, V., Van Broeck, N., & Philippot, P. (2009). Intervening on persistent posttraumatic stress disorder: rumination-focused cognitive and behavioral therapy in a population of young survivors of the 1994 genocide in Rwanda. *Journal of Cognitive Psychotherapy*, 23(2), 107-113. doi:10.1891/0889-8391.23.2.107
 28. Farhood, L. F., Richa, H., & Massalkhi, H. (2014). Group mental health interventions in civilian populations in war-conflict areas: A Lebanese pilot study. *Journal of Transcultural Nursing*, 25(2), 176-182.
 29. Penn State University Libraries. (2011). *Nursing*. Penn State University Libraries. <https://guides.libraries.psu.edu/c.php?g=319063&p=5221999>
 30. Hopper, E. K., Bassuk, E. L., & Oliver, J. (2010). Shelter from the storm: Trauma-informed care in homelessness services settings. *The Open Health Services and Policy Journal*, 3, 80-100
 31. Awele. (2016, October 25). *What does 'resilience' mean for occupational therapists (ots) in the modern workplace?* The Work Stress Buster. <https://theworkstressbuster.co.uk/news/what-does-resilience-mean-for-occupational-therapists-ots-in-the-modern-workplace/>
 32. Vincuilla, S. (2018, August 23). *The meaning of work*. Creative Occupational Therapy. <https://creativeoccupationaltherapy.wordpress.com/category/resilience/>
 33. *What is psychoeducation?* (2021, March 21). Best Counseling Degrees. <https://www.bestcounselingdegrees.net/resources/psychoeducation/>
 34. Steed, R. (2014). A client-centered model of instructional design for psychoeducation interventions in occupational therapy. *Occupational Therapy in Mental Health*, 30(2), 126-143.
 35. Joo, J. Y., & Liu, M. F. (2020). Culturally tailored interventions for ethnic minorities: A scoping review. *Nursing Open*. doi:10.1002/nop2.733
 36. Wells, S. A. (2006). *The American Occupational Therapy Association advisory opinion for the ethics commission: Cultural competence and ethical practice*. American Occupational Therapy Association. <https://www.aota.org/-/media/Corporate/Files/Practice/Ethics/Advisory/Cultural-Competency.docx>
 37. American Occupational Therapy Association. (2020). *Guidelines of systematic reviews*. American Occupational Therapy Association. https://ajot.submit2aota.org/journals/ajot/forms/systematic_reviews.pdf

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