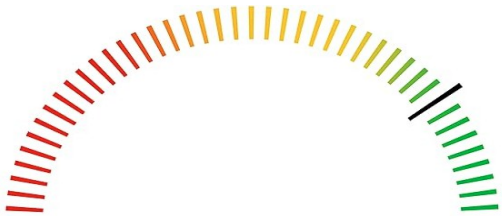


Tell Me Where It Hurts

by Rachel Zoffness PhD

Complete Reference List
Part 1

CHAPTER 1.

1. Adams, L. M., & Turk, D. C. (2018). Central sensitization and the biopsychosocial approach to understanding pain. Journal of Applied Biobehavioral Research, 23(2), e12125.
2. Andronis, L., Kinghorn, P., Qiao, S., et al. (2017). Cost-effectiveness of non-invasive and non-pharmacological interventions for low back pain: a systematic literature review. *Applied health economics and health policy*, *15*, 173-201.
3. Baber, Z., & Erdek, M. A. (2016). Failed back surgery syndrome: current perspectives. *Journal of pain research*, 979-987.
4. Barnett, K., Mercer, S. W., Norbury, M., et al. (2012). Epidemiology of multimorbidity and implications for health care, research, and medical education: a cross-sectional study. *The Lancet*, *380*(9836), 37-43.
5. Bendelow, G. (2013). Chronic pain patients and the biomedical model of pain. *AMA Journal of Ethics*, *15*(5), 455-459.
6. Beswick, A. D., Wylde, V., Gooberman-Hill, R., et al. (2012). What proportion of patients report long-term pain after total hip or knee replacement for osteoarthritis? A systematic review of prospective studies in unselected patients. *BMJ open*, *2*(1), e000435.
7. Bevers, K., Watts, L., Kishino, N. D., et al. (2016). The biopsychosocial model of the assessment, prevention, and treatment of chronic pain. *US neurol*, *12*(2), 98-104.
8. Bove, G. M., Naylor, M., & Bushnell, M. C. (2018). Complementary and integrative approaches for pain management.
9. Breuer, B., Cruciani, R., & Portenoy, R. K. (2010). Pain management by primary care physicians, pain physicians, chiropractors, and acupuncturists: a national survey. *Southern medical journal*, *103*(8), 738-747.

10. Brox, J. I., Nygaard, Ø. P., Holm, I., et al, O. (2010). Four-year follow-up of surgical versus non-surgical therapy for chronic low back pain. *Annals of the rheumatic diseases*, *69*(9), 1643-1648.
11. Bujak, B., Regan, E., Beattie, P., et al. (2019). The effectiveness of interdisciplinary intensive outpatient programs in a population with diverse chronic pain conditions: a systematic review and meta-analysis. *Pain Management*, *9*(4), 417-429.
12. Carr, D. B., & Bradshaw, Y. S. (2014). Time to flip the pain curriculum? Anesthesiology, 120(1), 12-14.
13. Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS). Underlying cause of death 1999-2013 on CDC WONDER online database, released 2015.
14. Chan, C. W., & Peng, P. (2011). Failed back surgery syndrome. *Pain medicine*, *12*(4), 577-606.
15. Darnall, B. D., Scheman, J., Davin, S., et al. (2016). Pain psychology: a global needs assessment and national call to action. *Pain Medicine*, *17*(2), 250-263.
16. Desai, G., & Chaturvedi, S. K. (2012). Pain with no cause! Nurses' perception. *Indian Journal of Palliative Care*, *18*(3), 162.
17. Dhillon, K. S. (2016). Spinal fusion for chronic low back pain: a 'magic bullet' or wishful thinking?. *Malaysian Orthopaedic Journal*, *10*(1), 61.
18. Dowell D, Ragan K, Jones C, et al (2022). CDC Clinical Practice Guideline for Prescribing Opioids for Pain — United States. MMWR Recomm Rep, 71(No. RR-3), 1–95
19. Duff, J. H. (2021). Consumption of Prescription Opioids for Pain. Congressional Research Service.
20. Edwards, R., Dworkin, R., Sullivan, M., et al. (2016). The role of psychosocial processes in the development and maintenance of chronic pain. *The journal of pain*, *17*(9), T70-T92.
21. Elbers, S., Wittink, H., Konings, S., et al. (2022). Longitudinal outcome evaluations of Interdisciplinary Multimodal Pain Treatment programmes for patients with chronic primary musculoskeletal pain: A systematic review and meta-analysis. *European Journal of Pain*, *26*(2), 310-335.
22. Engel, G. L. (1977). The need for a new medical model: a challenge for biomedicine. *Science*, *196*(4286), 129-136.
23. Evans, J. R., Benore, E., & Banez, G. A. (2016). The cost-effectiveness of intensive interdisciplinary pediatric chronic pain rehabilitation. *Journal of pediatric psychology*, *41*(8), 849-856.
24. Farre, A., & Rapley, T. (2017). The new old (and old new) medical model: four decades navigating the biomedical and psychosocial understandings of health and illness. *Healthcare*. 5(4), 88.
25. Fillingim, M., Tanguay-Sabourin, C., Parisien, M., et al. (2025). Biological markers and psychosocial factors predict chronic pain conditions. *Nature Human Behaviour*, 1-16
26. Gan, T. (2017). Poorly controlled postoperative pain: prevalence, consequences, and prevention. *Journal of Pain Research*, 2287-2298.
27. Garland, E. (2012). Pain processing in the human nervous system: a selective review of nociceptive and biobehavioral pathways. *Primary Care: Clinics in Office Practice*, *39*(3), 561-571.
28. Gatchel R and Maddrey A. (2004). The Biopsychosocial Perspective of Pain. In: Raczynski J and Leviton L, eds. Healthcare Psychology Handbook. Vol II. APA Press. Washington, DC.
29. Gibbs, M., Morrison, N., & Marshall, P. (2021). Biomedical beliefs explain the clinical decisions made by exercise-based practitioners for people with chronic low back pain. Spine, 46(2), 114-121.
30. Gouge, N., Polaha, J., Rogers, R., et al. (2016). Integrating Behavioral Health into Pediatric Primary Care: Implications for Provider Time and Cost. *Southern Medical Journal*, *109*(12), 774-778.
31. Hara, S., Andresen, H., Solheim, O., et al. (2022). Effect of spinal cord burst stimulation vs placebo stimulation on disability in patients with chronic radicular pain after lumbar spine surgery: a randomized clinical trial. *JAMA*, *328*(15), 1506-1514.
32. Holst, J. (2022). Biomedical Perspective: Critical Assessment of an Outdated Concept. *Open Access J Biomed Sci*, *4*(2), 000435.

33. Institute of Medicine Committee on Advancing Pain Research, Care, and Education (2011). Relieving Pain in America: A Blueprint for Transforming Prevention, Care, Education, and Research. Washington (DC): National Academies Press (US).
34. Jayawardana, S., Forman, R., Johnston-Webber, C., et al. (2021). Global consumption of prescription opioid analgesics between 2009-2019: a country-level observational study. *EClinicalMedicine*, *42.*
35. Johnson, M. (2019). The landscape of chronic pain: broader perspectives. *Medicina*, *55*(5), 182.
36. Jones, C., Shaheed, C., Ferreira, G., et al. (2022). Spinal cord stimulators: an analysis of the adverse events reported to the Australian therapeutic goods administration. *Journal of Patient Safety*, *18*(5), 507-511.
37. Le, A., Dick, B., Spiers, J., et al. (2019). Parents' experiences with pediatric chronic pain. *Canadian Journal of Pain*, *3*(1), 20-32.
38. Loeser, J. (2012). Five crises in pain management. Revista de la Sociedad Española del Dolor, 19(3), 111-116.
39. Loeser, J. (2015). The education of pain physicians. Pain Medicine, 16(2), 225-229.
40. Loeser J. & Schatman M. (2017). Chronic pain management in medical education: a disastrous omission. Postgraduate Medicine, 129(3), 332-335.
41. Lucas, J. & Sohi, I. (2024). *Chronic Pain and High-impact Chronic Pain in US Adults, 2023*. U.S. Department of Health & Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics.
42. Mackey, S. (2016). Future directions for pain management: Lessons from the institute of medicine pain report and the national pain strategy. *Hand clinics*, *32*(1), 91.
43. Manchikanti, L. & Singh, A. (2008). Therapeutic opioids: a ten-year perspective on the complexities and complications of the escalating use, abuse, and nonmedical use of opioids. *Pain Physician*, *11*(2S), S63.
44. Mannion, A., Brox, J., & Fairbank, J. (2016). Consensus at last! Long-term results of all randomized controlled trials show that fusion is no better than non-operative care in improving pain and disability in chronic low back pain. *The Spine Journal*, *16*(5), 588-590.
45. Martucci, K. & Mackey, S. (2016). Imaging pain. *Anesthesiology clinics*, *34*(2), 255-269.
46. Matthews, J., Zoffness, R., & Becker, D. (2021). Integrative pediatric pain management: Impact & implications of a novel interdisciplinary curriculum. Complementary Therapies in Medicine, 59, 102721.
47. Meints, S. & Edwards, R. (2018). Evaluating psychosocial contributions to chronic pain outcomes. *Progress in Neuro-Psychopharmacology and Biological Psychiatry*, *87*, 168-182.
48. Mezei, L., Murinson, B. (2011). Pain education in North American medical schools. *The Journal of Pain*, *12*(12), 1199-1208.
49. Mills, S., Nicolson, K., & Smith, B. (2019). Chronic pain: a review of its epidemiology and associated factors in population-based studies. British Journal of Anaesthesia, 123(2), e273-e283.
50. Muhuri, P., Gfroerer, J., & Davies, M. C. (2013). CBHSQ data review. Center for Behavioral Health Statistics and Quality, SAMHSA, 1, 17.
51. Murray, M., Stone, A., Pearson, V., et al. (2019). Clinical solutions to chronic pain and the opiate epidemic. Preventive Medicine, 118, 171-175.
52. Nahin, R. L., Boineau, R., Khalsa, P. S., et al. (2016). Evidence-based evaluation of complementary health approaches for pain management in the United States. *Mayo Clinic Proceedings*, 91(9), 1292-1306
53. Nahin, R. L. (2015). Estimates of pain prevalence and severity in adults: United States, 2012. *The journal of pain*, *16*(8), 769-780.
54. Nahin, R. L. (2022). Use of multimodal multidisciplinary pain management in the US. JAMA Network Open, 5(11), e2240620-e2240620.

55. Nguyen, T., Randolph, D., Talmage, J., et al. (2011). Long-term outcomes of lumbar fusion among workers' compensation subjects: a historical cohort study. *Spine*, *36*(4), 320-331.
56. O'Rorke, J., Chen, I., Genao, I., et al. (2007). Physicians' comfort in caring for patients with chronic nonmalignant pain. *The American journal of the medical sciences*, *333*(2), 93-100.
57. Orchard, J. W. (2023). Pay attention to the evidence: In the longer term, intraarticular corticosteroid injections offer only harm for knee osteoarthritis. *Osteoarthritis and Cartilage*, *31*(2), 142-143.
58. Raffaeli, W., & Arnaudo, E. (2017). Pain as a disease: an overview. *Journal of pain research*, 2003-2008.
59. Rice, K., Ryu, J. E., Whitehead, C., et al. (2018). Medical trainees' experiences of treating people with chronic pain: a lost opportunity for medical education. Academic Medicine, 93(5), 775-780.
60. Schnell, M. K. (2019). The opioid crisis: Tragedy, treatments and trade-offs. Institute for Economic Policy Research.
61. Shipton, E., Steketee, C., & Visser, E. (2023). The Pain Medicine Curriculum Framework-structured integration of pain medicine education into the medical curriculum. *Frontiers in Pain Research*, *3*, 1057114.
62. Shipton, E., Bate, F., Garrick, R., et al. (2018). Systematic review of pain medicine content, teaching, and assessment in medical school curricula internationally. *Pain and therapy*, *7*, 139-161.
63. Simon, L. (2012). Relieving pain in America: A blueprint for transforming prevention, care, education, and research. Journal of pain & palliative care pharmacotherapy, 26(2), 197-198.
64. Smith, R. C., Fortin, A. H., Dwamena, F., et al. (2013). An evidence-based patient-centered method makes the biopsychosocial model scientific. Patient education and counseling, 91(3), 265-270.
65. Tauben, D. J., & Loeser, J. D. (2013). Pain education at the University of Washington School of Medicine. The Journal of Pain, 14(5), 431-437.
66. The Joint Commission. (2017). Joint Commission enhances pain assessment and management requirements for accredited hospitals. The Joint Commission Perspectives, 37(7), 1-4.
67. Thompson, K., Johnson, M., Milligan, J., et al. (2018). Twenty-five years of pain education research—what have we learned? Findings from a comprehensive scoping review of research into pre-registration pain education for health professionals. Pain, 159(11), 2146-2158.
68. Thomson, S. (2013). Failed back surgery syndrome–definition, epidemiology and demographics. British journal of pain, 7(1), 56-59.
69. Tick, H., Chauvin, S. W., Brown, M., et al. (2015). Core competencies in integrative pain care for entry-level primary care physicians. *Pain Medicine*, *16*(11), 2090-2097.
70. Tick, H., Nielsen, A., Pelletier, K. et al. (2018). Evidence-based nonpharmacologic strategies for comprehensive pain care: the consortium pain task force white paper. Explore, 14(3), 177-211.
71. Traeger, A., Gilbert, S., Harris, I. et al. (2023). Spinal cord stimulation for low back pain. Cochrane Database of Systematic Reviews, (3).
72. U.S. Department of Health and Human Services (2019). Pain Management Best Practices Inter-Agency Task Force Report: Updates, Gaps, Inconsistencies, and Recommendations. Retrieved from U. S. Department of Health and Human Services.
73. Upshur, C., Luckmann, R., & Savageau, J. (2006). Primary care provider concerns about management of chronic pain in community clinic populations. Journal of general internal medicine, 21, 652-655.
74. Vadivelu, N., Mitra, S., & Hines, R. (2013). Undergraduate medical education on pain management across the globe. AMA Journal of Ethics, 15(5), 421-427.
75. Vargovich, A. M., Schumann, M. E., Xiang, J., et al. (2019). Difficult conversations: training medical students to assess, educate, and treat the patient with chronic pain. *Academic Psychiatry*, *43*, 494-498.

76. Wade, D. & Halligan, P. (2017). The biopsychosocial model of illness: a model whose time has come. *Clinical rehabilitation*, *31*(8), 995-1004.
77. Wager TD (2022). Managing Pain. Cerebrum. 2022, cer-03.
78. Walker, B. F. (2000). The prevalence of low back pain: a systematic review of the literature from 1966 to 1998. *Clinical Spine Surgery*, *13*(3), 205-217.
79. Watt-Watson, J., & Murinson, B. B. (2013). Current challenges in pain education. *Pain management*, *3*(5), 351-357.
80. Wu, A., March, L., Zheng, X., et al. (2020). Global low back pain prevalence and years lived with disability from 1990 to 2017: estimates from the Global Burden of Disease Study 2017. *Annals of translational medicine*, *8*(6), 299.
81. Xu, W., Ran, B., Luo, W., et al. (2021). Is lumbar fusion necessary for chronic low back pain associated with degenerative disk disease? A meta-analysis. *World Neurosurgery*, *146*, 298-306.
82. Yanni, L. M., McKinney-Ketchum, J. L., Harrington, S. B., et al. (2010). Preparation, confidence, and attitudes about chronic noncancer pain in graduate medical education. *Journal of Graduate Medical Education*, *2*(2), 260-268.

CHAPTER 2.

1. Ambron, R. (2023). Toward the unknown: consciousness and pain. Neuroscience of Consciousness, 2023(1), niad002.
2. Associated Press (2005). Cause of Man's Toothache? A 4-Inch Nail. New York Times, Jan 17, 2005.
3. Baber, Z., & Erdek, M. A. (2016). Failed back surgery syndrome: current perspectives. *Journal of pain research*, 979-987.
4. Beattie, K. A., Boulos, P., Pui, M., et al. (2005). Abnormalities identified in the knees of asymptomatic volunteers using peripheral magnetic resonance imaging. *Osteoarthritis and cartilage*, *13*(3), 181-186.
5. Bertozzi, L., Negrini, S., Agosto, D., et al. (2021). Posture and time spent using a smartphone are not correlated with neck pain and disability in young adults: A cross-sectional study. Journal of bodywork and movement therapies, 26, 220-226.
6. Beswick, A. D., Wylde, V., Gooberman-Hill, R., et al. (2012). What proportion of patients report long-term pain after total hip or knee replacement for osteoarthritis? A systematic review of prospective studies in unselected patients. *BMJ open*, *2*(1), e000435.
7. Bloski T, Pierson R. (2008) Endometriosis and Chronic Pelvic Pain: Unraveling the Mystery Behind this Complex Condition. Nurs Womens Health. 12(5), 382-95
8. Brinjikji, W., Luetmer, P., Comstock, B., et al. (2015). Systematic literature review of imaging features of spinal degeneration in asymptomatic populations. American journal of neuroradiology, 36(4), 811-816.
9. Brosch, A. (2010). Boyfriend Doesn't Have Ebola. Probably. Hyperbole and a Half. Feb 10, 2010.
10. Burton, A., Fazalbhoy, A., & Macefield, V. (2016). Sympathetic responses to noxious stimulation of muscle and skin. Frontiers in Neurology, 7, 109.
11. Campo-Prieto P. & Rodríguez-Fuentes G. (2022). Effectiveness of mirror therapy in phantom limb pain: A literature review. Neurología, 37(8), 668-681.
12. Carlino, E., & Benedetti, F. (2016). Different contexts, different pains, different experiences. *Neuroscience*, *338*, 19-26.
13. Carlino, E., Frisaldi, E., & Benedetti, F. (2014). Pain and the context. Nature Reviews Rheumatology, 10(6), 348-355.
14. Chan, C. & Peng, P. (2011). Failed back surgery syndrome. Pain medicine, 12(4), 577-606.
15. Cohen, S. P. (2015). Epidemiology, diagnosis, and treatment of neck pain. Mayo Clinic Proceedings, 90(2): 284-299.

16. Collins, K., Russell, H., Schumacher, P., et al. (2018). A review of current theories and treatments for phantom limb pain. The Journal of clinical investigation, 128(6), 2168-2176.
17. Craig, K. D., & MacKenzie, N. E. (2021). What is pain: Are cognitive and social features core components? Paediatric and Neonatal Pain, 3(3), 106-118.
18. Crosson, T., Roversi, K., Balood, M., et al. (2019). Profiling of how nociceptor neurons detect danger–new and old foes. *Journal of internal medicine*, *286*(3), 268-289.
19. Deyo, R. A., Mirza, S. K., Turner, J. A., et al. (2009). Overtreating chronic back pain: time to back off?. *The Journal of the American Board of Family Medicine*, *22*(1), 62-68.
20. Deyo, R. A., Rainville, J., & Kent, D. L. (1992). What can the history and physical examination tell us about low back pain?. *Jama*, *268*(6), 760-765.
21. Dimsdale, J. E., & Dantzer, R. (2007). A biological substrate for somatoform disorders: importance of pathophysiology. Psychosomatic medicine, 69(9), 850–854.
22. Eveleth, R. (2014). Americans Are More into BDSM Than the Rest of the World. Smithsonian Magazine. (Feb. 10, 2014). ("According to a 2005 survey by Durex, 36% of adults in the U.S. use masks, blindfolds and bondage tools during sex.")
23. Fisher JP, Hassan DT, O'Connor N. (1995). Minerva. British Medical Journal. 310, 70.
24. Flynn, T., Smith, B., & Chou, R. (2011). Appropriate use of diagnostic imaging in low back pain: a reminder that unnecessary imaging may do as much harm as good. Journal of Orthopaedic & Sports Physical Therapy, 41(11), 838-846.
25. Forsberg LA, Absher D, Dumanski JP. (2013) Non-heritable genetics of human disease: spotlight on post-zygotic genetic variation acquired during lifetime. J Med Genet. 50(1):1-10.
26. Frank, J. M., Harris, J. D., Erickson, B. J., et al. (2015). Prevalence of femoroacetabular impingement imaging findings in asymptomatic volunteers: a systematic review. *Arthroscopy: The Journal of Arthroscopic & Related Surgery*, *31*(6), 1199-1204.
27. Freburger, J. K., Holmes, G. M., Agans, R., et al. (2009). The rising prevalence of chronic low back pain. Archives of internal medicine, 169(3), 251-258.
28. Fredericson, M., Ho, C., Waite, B., et al. (2009). Magnetic resonance imaging abnormalities in the shoulder and wrist joints of asymptomatic elite athletes. PM&R, 1(2), 107-116.
29. Fuchs, X., Flor, H., & Bekrater-Bodmann, R. (2018). Psychological factors associated with phantom limb pain: a review of recent findings. *Pain Research and Management*, *2018*(1), 5080123.
30. Garcia-Larrea L, Bastuji H. (2018) Pain and consciousness. Prog Neuropsychopharmacol Biol Psychiatry. 87:193-199
31. Garland, E., Froeliger, B., Zeidan, F., et al. (2013). The downward spiral of chronic pain, prescription opioid misuse, and addiction: cognitive, affective, and neuropsychopharmacologic pathways. Neuroscience & Biobehavioral Reviews, 37(10), 2597-2607.
32. Gartner, E. (2005). Cause of "toothache" was 4-inch nail in man's skull. Seattle Times, Jan 17, 2005.
33. Gijy, J. (2021). Olympic Legend Usain Bolt Admits He Never Corrected His Scoliosis Throughout Career. Essentially Sports. Sept 6, 2021.
34. Gilam, G., Gross, J., Wager, T. et al. (2020). What is the relationship between pain and emotion? Bridging constructs and communities. Neuron, 107(1), 17-21.
35. Guermazi, A., Niu, J., Hayashi, D., et al. (2012). Prevalence of abnormalities in knees detected by MRI in adults without knee osteoarthritis: population based observational study (Framingham Osteoarthritis Study). *Bmj*, *345.*
36. Hall, A. M., Aubrey-Bassler, K., Thorne, B., et al. (2021). Do not routinely offer imaging for uncomplicated low back pain. *bmj*, *372.*
37. Hameed, S. (2019). Nav1. 7 and Nav1. 8: Role in the pathophysiology of pain. *Molecular pain*, *15*, 1744806919858801.

38. Hara, S., Andresen, H., Solheim, O., et al. (2022). Effect of spinal cord burst stimulation vs placebo stimulation on disability in patients with chronic radicular pain after lumbar spine surgery: a randomized clinical trial. *Jama*, *328*(15), 1506-1514.
39. Harris, I. A., Sidhu, V., Mittal, R., et al. (2020). Surgery for chronic musculoskeletal pain: the question of evidence. Pain, 161, S95-S103.
40. Henschke, N., Maher, C., Refshauge, K., et al. (2009). Prevalence of and screening for serious spinal pathology in patients presenting to primary care settings with acute low back pain. Arthritis & Rheumatism: Official Journal of the American College of Rheumatology, 60(10), 3072-3080.
41. Hobson, J. M., Moody, M. D., Sorge, R. E., et al. (2022). The neurobiology of social stress resulting from Racism: Implications for pain disparities among racialized minorities. *Neurobiology of Pain*, *12*, 100101.
42. Howard, D. (2011). Bolt: "I want to do wild things." ESPN, the magazine. Nov. 29. 2011.
43. Innes, S. I. (2005). Psychosocial factors and their role in chronic pain: A brief review of development and current status. Chiropractic & Osteopathy, 13, 1-5.
44. Karran, E. L., Grant, A. R., & Moseley, G. L. (2020). Low back pain and the social determinants of health: a systematic review and narrative synthesis. *Pain*, *161*(11), 2476-2493.
45. Kasch, R., Truthmann, J., Hancock, M. J., et al. (2022). Association of lumbar MRI findings with current and future back pain in a population-based cohort study. *Spine*, *47*(3), 201-211.
46. Katz, J., Rosenbloom, B. N., & Fashler, S. (2015). Chronic pain, psychopathology, and DSM-5 somatic symptom disorder. *The Canadian Journal of Psychiatry*, *60*(4), 160-167.
47. Kaur, A., & Guan, Y. (2018). Phantom limb pain: A literature review. *Chinese journal of traumatology*, *21*(06), 366-368.
48. Khera, T., & Rangasamy, V. (2021). Cognition and pain: a review. Frontiers in psychology, 12, 673962.
49. Koch, C., & Hänsel, F. (2019). Non-specific low back pain and postural control during quiet standing—a systematic review. Frontiers in psychology, 10, 586.
50. Krahé, C., Springer, A., Weinman, J. A., et al. (2013). The social modulation of pain: others as predictive signals of salience–a systematic review. Frontiers in human neuroscience, 7, 386.
51. Kuner, R., & Flor, H. (2017). Structural plasticity and reorganisation in chronic pain. Nature Reviews Neuroscience, 18(1), 20-30.
52. Leknes, S., Berna, C., Lee, M. C., et al. (2013). The importance of context: when relative relief renders pain pleasant. *Pain*, *154*(3), 402-410.
53. Linton, S. J., & Shaw, W. S. (2011). Impact of psychological factors in the experience of pain. Physical therapy, 91(5), 700-711.
54. Loeser, J. D., & Melzack, R. (1999). Pain: an overview. The Lancet, 353(9164), 1607-1609.
55. Longman, J. (2017). Something Strange in Usain Bolt's Stride: Bolt is the fastest sprinter ever in spite of — or because of? — an uneven stride that upends conventional wisdom. New York Times. July 20, 2017.
56. Lotze M. & Moseley GL. (2015). Theoretical considerations for chronic pain rehabilitation. Physical therapy, 95(9), 1316-1320.
57. Lumley, M., Cohen, J., Borszcz, G., et al. (2011). Pain and emotion: a biopsychosocial review of recent research. Journal of clinical psychology, 67(9), 942-968.
58. Luza, L. P., Ferreira, E. G., Minsky, R. C., et al. (2020). Psychosocial and physical adjustments and prosthesis satisfaction in amputees: a systematic review of observational studies. *Disability and Rehabilitation: Assistive Technology*, *15*(5), 582-589.
59. Main, C. J., Keefe, F. J., Jensen, M. et al (2015). Fordyce's behavioral methods for chronic pain and illness. Lippincott Williams & Wilkins;
60. Martucci, K. T., & Mackey, S. C. (2018). Neuroimaging of pain: human evidence and clinical relevance of central nervous system processes and modulation. *Anesthesiology*, *128*(6), 1241.

61. McCarberg, B., & Peppin, J. (2019). Pain pathways and nervous system plasticity: learning and memory in pain. Pain Medicine, 20(12), 2421-2437.
62. Meloto, C. B., Benavides, R., Lichtenwalter, R., et al. (2018). Human pain genetics database: a resource dedicated to human pain genetics research. Pain, 159(4), 749-763.
63. Melzack, R. (1999). From the gate to the neuromatrix. *Pain*, *82*, S121-S126.
64. Melzack, R., & Casey, K. L. (1968). Sensory, motivational, and central control determinants of pain: a new conceptual model. The skin senses, 1, 423-43.
65. Melzack, R., & Katz, J. (2013). Pain. *Wiley Interdisciplinary Reviews: Cognitive Science*. 4, 1–15.
66. Melzack R & Wall PD. (1965). Pain Mechanisms: A New Theory. Science. 150: 971–9.
67. Mercer L, N., Chen, C., Gilam, G., et al. (2021). Brain circuits for pain and its treatment. Science translational medicine, 13(619), eabj7360.
68. Mills, S. E., Nicolson, K. P., & Smith, B. H. (2019). Chronic pain: a review of its epidemiology and associated factors in population-based studies. *British journal of anaesthesia*, *123*(2), e273-e283.
69. Minagawa, H., Yamamoto, N., Abe, H., et al. (2013). Prevalence of symptomatic and asymptomatic rotator cuff tears in the general population: from mass-screening in one village. *Journal of orthopaedics*, *10*(1), 8-12.
70. Mischkowski, D., Palacios-Barrios, E. E., Banker, L., et al. (2018). Pain or nociception? Subjective experience mediates the effects of acute noxious heat on autonomic responses. *Pain*, *159*(4), 699-711.
71. Moayedi, M., & Davis, K. D. (2013). Theories of pain: from specificity to gate control. Journal of neurophysiology, 109(1), 5-12.
72. Moseley, G. (2003). A pain neuromatrix approach to patients with chronic pain. Manual therapy, 8(3), 130-140.
73. Moseley, G. (2007). Reconceptualising pain according to modern pain science. Physical therapy reviews, 12(3), 169-178.
74. Moseley, G. (2012). Teaching people about pain: why do we keep beating around the bush?. Pain management, 2(1), 1-3.
75. Moseley G. & Arntz A. (2007). The context of a noxious stimulus affects the pain it
76. evokes. PAIN, 133(1-3), 64-71.
77. Moseley, G. & Butler, D. (2015). Fifteen years of explaining pain: the past, present, and future. The Journal of Pain, 16(9), 807-813.
78. Moseley, L. & Conversation. (2015). Explainer: what is pain and what is happening when we feel it?. The Conversation.
79. Motta, S., Carobrez, A., & Canteras, N. (2017). The periaqueductal gray and primal emotional processing critical to influence complex defensive responses, fear learning and reward seeking. Neuroscience & Biobehavioral Reviews, 76, 39-47.
80. Nakashima, H., Yukawa, Y., Suda, K., et al. (2015). Abnormal findings on magnetic resonance images of the cervical spines in 1211 asymptomatic subjects. Spine, 40(6), 392-398.
81. Nordahl, S., Alstergren, P., Appelgren, A., et al. (1997). Pain, tenderness, mandibular mobility, and anterior open bite in relation to radiographic erosions in temporomandibular joint disease. *Acta Odontologica Scandinavica*, *55*(1), 18-22.
82. O'Sullivan, P. (2005). Diagnosis and classification of chronic low back pain disorders: maladaptive movement and motor control impairments as underlying mechanism. Manual Therapy 10, 242–255.
83. Patanwala, A. E., Norwood, C., Steiner, H., et al. (2019). Psychological and genetic predictors of pain tolerance. *Clinical and translational science*, *12*(2), 189-195.
84. Pirowska, A., Wloch, T., Nowobilski, R., et al. (2014). Phantom phenomena and body scheme after limb amputation: a literature review. *Neurologia i neurochirurgia polska*, *48*(1), 52-59.

85. Prego-Domínguez, J., Skillgate, E., Orsini, N., et al. (2022). Social factors and chronic pain: the modifying effect of sex in the Stockholm Public Health Cohort Study. Rheumatology, 61(5), 1802-1809.
86. Raffaeli, W., & Arnaudo, E. (2017). Pain as a disease: an overview. *Journal of pain research*, 2003-2008.
87. Raja, S., Carr, D., Cohen, M., et al. (2020). The revised International Association for the Study of Pain definition of pain: concepts, challenges, and compromises. Pain, 161(9), 1976-1982.
88. Ramachandran, V. S., & Blakeslee, S. (1998). Phantoms in the Brain: Probing the Mysteries of the Human Mind. New York: William Morrow & Co.
89. Register, B., Pennock, A. T., Ho, C. P., et al. (2012). Prevalence of abnormal hip findings in asymptomatic participants: a prospective, blinded study. *The American journal of sports medicine*, *40*(12), 2720-2724
90. Rossettini, G., Camerone, E. M., Carlino, E., et al. (2020). Context matters: the psychoneurobiological determinants of placebo, nocebo and context-related effects in physiotherapy. *Archives of Physiotherapy*, *10*, 1-12.
91. Rozin, P., Guillot, L., Fincher, K., Rozin, A., & Tsukayama, E. (2013). Glad to be sad, and other examples of benign masochism. *Judgment and decision making*, *8*(4), 439-447.
92. Schwartzberg, R., Reuss, B. L., Burkhart, B. G., et al. (2016). High prevalence of superior labral tears diagnosed by MRI in middle-aged patients with asymptomatic shoulders. *Orthopaedic journal of sports medicine*, *4*(1), 2325967115623212.
93. Sgourdou, P. (2022). The consciousness of pain: A thalamocortical perspective. NeuroSci, 3(2), 311-320.
94. Simons, L., Moulton, E., Linnman, C., et al. (2014). The human amygdala and pain: evidence from neuroimaging. Human brain mapping, 35(2), 527-538.
95. Sturgeon, J. A., & Zautra, A. J. (2016). Social pain and physical pain: shared paths to resilience. *Pain management*, *6*(1), 63-74.
96. Thieme, H., Morkisch, N., Mehrholz, J., et al. (2018). Mirror therapy for improving motor function after stroke. *Cochrane database of systematic reviews*, (7).
97. Till, S. R., As-Sanie, S., & Schrepf, A. (2019). Psychology of chronic pelvic pain: prevalence, neurobiological vulnerabilities, and treatment. *Clinical obstetrics and gynecology*, *62*(1), 22-36.
98. Tracy, L. M. (2017). Psychosocial factors and their influence on the experience of pain. *Pain reports*, *2*(4), e602.
99. Tracy, L. M. (2017). Psychosocial factors and their influence on the experience of pain. Pain reports, 2(4), e602.
100. Traeger, A. C., Gilbert, S. E., Harris, I. et al (2023). Spinal cord stimulation for low back pain. Cochrane Database of Systematic Reviews, (3).
101. Turner, J. A., Loeser, J. D., Deyo, R. et al. (2004). Spinal cord stimulation for patients with failed back surgery syndrome or complex regional pain syndrome: a systematic review of effectiveness and complications. Pain, 108(1-2), 137-147.
102. Van Der Miesen, M., Lindquist, M., & Wager, T. (2019). Neuroimaging-based biomarkers for pain: state of the field and current directions. *Pain reports*, *4*(4), e751.
103. Van Tulder, M., & Koes, B. (2010). Chronic low back pain. Evidence-Based Chronic Pain Management, 69-82.
104. Villemure, C., & Bushnell, M. C. (2002). Cognitive modulation of pain: how do attention and emotion influence pain processing?. Pain, 95(3), 195-199.
105. Walsh, K. T., Boring, B. L., Nanavaty, N., et al. (2022). Lifetime ostracism experiences and mechanisms of pain. Frontiers in Pain Research, 3, 1037472.
106. Wiech, K., & Tracey, I. (2009). The influence of negative emotions on pain: behavioral effects and neural mechanisms. Neuroimage, 47(3), 987-994.

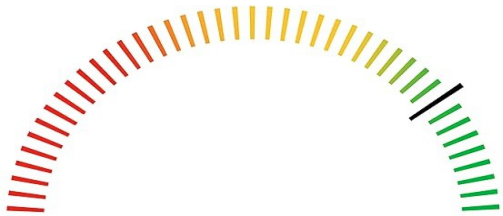
107. Wistrom, E., Chase, R., Smith, P. R., et al. (2022). A compendium of validated pain genes. *WIREs Mechanisms of Disease*, *14*(6), e1570.
108. Witzeman, K. A. (2021). The complex intersection of pelvic pain and mental health in women. *Pract Pain Manag*, *21*(3).
109. Woolf, C. J., & Ma, Q. (2007). Nociceptors—noxious stimulus detectors. *Neuron*, *55*(3), 353-364.
110. Yang, S., & Chang, M. C. (2019). Chronic pain: structural and functional changes in brain structures and associated negative affective states. *International journal of molecular sciences*, *20*(13), 3130.
111. Zoffness, R. (2020). *The Pain Management Workbook.* New Harbinger.

CHAPTER 3.

1. Acevedo, B. P., Aron, E. N., Aron, A., et al. (2014). The highly sensitive brain: an fMRI study of sensory processing sensitivity and response to others' emotions. *Brain and behavior*, *4*(4), 580-594.
2. M. Adams, L., & C. Turk, D. (2015). Psychosocial factors and central sensitivity syndromes. *Current rheumatology reviews*, *11*(2), 96-108.
3. Aron, E., Aron, A., & Jagiellowicz, J. (2012). Sensory processing sensitivity: A review in the light of the evolution of biological responsivity. Personality and Social Psychology Review, 16(3), 262-282.
4. Assary, E., Oginni, O. A., Morneau-Vaillancourt, G., et al. (2024). Genetics of environmental sensitivity and its association with variations in emotional problems, autistic traits, and wellbeing. Molecular Psychiatry, 1-9.
5. Basbaum, A. I., Bautista, D. M., Scherrer, G., et al. (2009). Cellular and molecular mechanisms of pain. Cell, 139(2), 267-284.
6. Bilgili, A., Çakır, T., Doğan, Ş. K., et al. (2016). The effectiveness of transcutaneous electrical nerve stimulation in the management of patients with complex regional pain syndrome: a randomized, double-blinded, placebo-controlled prospective study. *Journal of back and musculoskeletal rehabilitation*, *29*(4), 661-671.
7. Birklein, F., Ajit, S. K., Goebel, A., et al. (2018). Complex regional pain syndrome—phenotypic characteristics and potential biomarkers. *Nature Reviews Neurology*, *14*(5), 272-284.
8. Burton, E., Campbell, C., Robinson, M., et al. (2016). (322) Sleep mediates the relationship between central sensitization and clinical pain. The Journal of Pain, 17(4), S56.
9. Buryanov, A., Kostrub, A., & Kotiuk, V. (2017). Endocrine disorders in women with complex regional pain syndrome type I. *European Journal of Pain*, *21*(2), 302-308.
10. Bushnell, M. C., Čeko, M., & Low, L. A. (2013). Cognitive and emotional control of pain and its disruption in chronic pain. Nature Reviews Neuroscience, 14(7), 502-511.
11. Clark, J., Nijs, J., Yeowell, G., et al. (2019). Trait sensitivity, anxiety, and personality are predictive of central sensitization symptoms in patients with chronic low back pain. *Pain Practice*, *19*(8), 800-810.
12. Cordier, L., & Diers, M. (2018). Learning and unlearning of pain. *Biomedicines*, *6*(2), 67.
13. Crofford, L. J. (2015). Chronic pain: where the body meets the brain. *Transactions of the American Clinical and Climatological Association*, *126*, 167.
14. De Schoenmacker, I., Mollo, A., Scheuren, P. S., et al. (2023). Central sensitization in CRPS patients with widespread pain: a cross-sectional study. *Pain Medicine*, *24*(8), 974-984.
15. Feldmann, M., Beckmann, D., Eysel, U. T., et al. (2019). Early loss of vision results in extensive reorganization of plasticity-related receptors and alterations in hippocampal function that extend through adulthood. *Cerebral Cortex*, *29*(2), 892-905.
16. Fine, P. G. (2011). Long-term consequences of chronic pain: mounting evidence for pain as a neurological disease and parallels with other chronic disease states. Pain medicine, 12(7), 996-1004.

17. Garland, E. (2012). Pain processing in the human nervous system: A selective review of nociceptive and biobehavioral pathways. Primary Care: Clinics in Office Practice, 39(3), 561-571.
18. Gigandet, M. (2024) The Extra Mile. The Atavist Magazine. June 2024.
19. Gold, M. S., & Gebhart, G. F. (2010). Nociceptor sensitization in pain pathogenesis. Nature medicine, 16(11), 1248-1257.
20. Greenwald, J. D., & Shafritz, K. M. (2018). An integrative neuroscience framework for the treatment of chronic pain: from cellular alterations to behavior. *Frontiers in Integrative Neuroscience*, *12*, 18.
21. Harte, S. E., Harris, R. E., & Clauw, D. J. (2018). The neurobiology of central sensitization. Journal of Applied Biobehavioral Research, 23(2), e12137.
22. Ji, R. R., Kohno, T., Moore, K. A., et al. (2003). Central sensitization and LTP: do pain and memory share similar mechanisms?. *Trends in neurosciences*, *26*(12), 696-705.
23. Ji, R., Nackley, A., Huh, Y., et al. (2018). Neuroinflammation and central sensitization in chronic and widespread pain. *Anesthesiology*, *129*(2), 343.
24. Ji, R., Kohno, T., Moore, K. A., et al. (2003). Central sensitization and LTP: do pain and memory share similar mechanisms?. Trends in neurosciences, 26(12), 696-705.
25. Jiang, Y., Oathes, D., Hush, J., et al. (2016). Perturbed connectivity of the amygdala and its subregions with the central executive and default mode networks in chronic pain. *Pain*, *157*(9), 1970-1978.
26. Karpin, H., Vatine, J. J., Bachar Kirshenboim, Y., et al. (2022). Central sensitization and psychological state distinguishing complex regional pain syndrome from other chronic limb pain conditions: a cluster analysis model. *Biomedicines*, *11*(1), 89.
27. Katz, J., & Seltzer, Z. E. (2009). Transition from acute to chronic postsurgical pain: risk factors and protective factors. Expert review of neurotherapeutics, 9(5), 723-744.
28. Kolb, L., Lang, C., Seifert, F., et al. (2012). Cognitive correlates of “neglect-like syndrome” in patients with complex regional pain syndrome. *PAIN*, *153*(5), 1063-1073.
29. Kuner, R., & Flor, H. (2017). Structural plasticity and reorganisation in chronic pain. Nature Reviews Neuroscience, 18(1), 20-30.
30. Latremoliere, A., & Woolf, C. J. (2009). Central sensitization: A generator of pain hypersensitivity by central neural plasticity. The Journal of Pain, 10(9), 895-926.
31. Lotze, M., & Moseley, G. L. (2015). Theoretical considerations for chronic pain rehabilitation. Physical therapy, 95(9), 1316-1320.
32. Louw, A. (2013). Why Do I Hurt? A Neuroscience Approach to Pain. Minneapolis, OPTP.
33. Rosa, A. M., Silva, M. F., Ferreira, S., et al. (2013). Plasticity in the human visual cortex: An ophthalmology-based perspective. *BioMed research international*, *2013*(1), 568354.
34. Martucci, K. T., & Mackey, S. C. (2016). Imaging pain. *Anesthesiology clinics*, *34*(2), 255-269.
35. McCarberg, B., & Peppin, J. (2019). Pain pathways and nervous system plasticity: learning and memory in pain. Pain Medicine, 20(12), 2421-2437.
36. Melzack, R., Coderre, T., Katz, J., et al. (2001). Central neuroplasticity and pathological pain. Annals of the New York Academy of Sciences, 933(1), 157-174.
37. Merzenich, M. (2013). *Soft-wired: How the new science of brain plasticity can change your life*. Parnassus Publishing.
38. Morellini, L., Izzo, A., Celeghin, A., et al. (2023). Sensory processing sensitivity and social pain: a hypothesis and theory. *Frontiers in human neuroscience*, *17*, 1135440.
39. Moseley, G. L., & Flor, H. (2012). Targeting cortical representations in the treatment of chronic pain: a review. Neurorehabilitation and neural repair, 26(6), 646-652.
40. Moseley, G. L., & Vlaeyen, J. W. (2015). Beyond nociception: the imprecision hypothesis of chronic pain. Pain, 156(1), 35-38.
41. Moseley, L. (2002). Combined physiotherapy and education is efficacious for chronic low back pain. Australian journal of physiotherapy, 48(4), 297-302.

42. Natraj, N., & Ganguly, K. (2018). Shaping reality through mental rehearsal. *Neuron*, *97*(5), 998-1000.
43. Nijs, J., George, S. Z., Clauw, D. J., et al. (2021). Central sensitisation in chronic pain conditions: latest discoveries and their potential for precision medicine. The Lancet Rheumatology, 3(5), e383-e392.
44. Price, T. J., & Dussor, G. (2014). Evolution: the advantage of 'maladaptive'pain plasticity. Current biology, 24(10), R384-R386.
45. Raffaeli, W. & Arnaudo, E. (2017). Pain as a disease: an overview. *Journal of Pain Research*, 2003-2008.
46. Silva, P. R., Farias, T., Cascio, F., et al. (2018). Neuroplasticity in visual impairments. Neurology international, 10(4), 7326.
47. Talbot, K., & Moseley, L. Everything You Wanted to Know About Central Sensitization. International Association for the Study of Pain. https://www.iasp-pain.org/publications/relief-news/article/central-sensitisation/
48. Ten Brink, A. F., & Bultitude, J. H. (2021). Predictors of self-reported neglect-like symptoms and involuntary movements in complex regional pain syndrome compared to other chronic limb pain conditions. *Pain Medicine*, *22*(10), 2337-2349.
49. Trask, S., Mogil, J., Helmstetter, F., et al. (2022). Contextual control of conditioned pain tolerance and endogenous analgesic systems. Elife, 11, e75283.
50. Treede, R., Rief, W., Barke, A., et al. (2019). Chronic pain as a symptom or a disease: the IASP Classification of Chronic Pain for the International Classification of Diseases (ICD-11). pain, 160(1), 19-27.
51. Van Der Miesen, M. M., Lindquist, M. A., & Wager, T. D. (2019). Neuroimaging-based biomarkers for pain: state of the field and current directions. *Pain reports*, *4*(4), e751.
52. Villa, M. C., Geminiani, G. C., Zettin, M., et al. (2023). Re-learning mental representation of walking after a brain lesion. Effects of a cognitive-motor training with a robotic orthosis. *Frontiers in Neurorobotics*, *17*, 1177201.
53. Vlaeyen, J. W., & Linton, S. J. (2012). Fear-avoidance model of chronic musculoskeletal pain: 12 years on. *Pain*, *153*(6), 1144-1147
54. Volcheck, M. M., Graham, S. M., Fleming, K. C., et al. (2023). Central sensitization, chronic pain, and other symptoms: Better understanding, better management. Cleveland Clinic journal of medicine, 90(4), 245-254.
55. Stig Severinsen. (2023, November 13). In Wikipedia. https://en.wikipedia.org/w/index.php?title=Stig_Severinsen&oldid=1184864663
56. Woolf, C. J. (2011). Central sensitization: implications for the diagnosis and treatment of pain. *Pain*, *152*(3), S2-S15.
57. Xu, Y., Hou, Q. H., Russell, S. D., et al. (2015). Neuroplasticity in post-stroke gait recovery and noninvasive brain stimulation. *Neural Regeneration Research*, *10*(12), 2072-2080.
58. Yancosek, K. E. (2012). Management of dominant upper extremity injuries: a survey of practice patterns. Journal of hand therapy, 25(1), 79-88.
59. Zeiler, S. R. (2019). Should we care about early post-stroke rehabilitation? Not yet, but soon. *Current neurology and neuroscience reports*, *19*, 1-9.



Tell Me Where It Hurts

by Rachel Zoffness PhD

Complete Reference List
Part 2

CHAPTER 5

1. Abdallah, C. & Geha, P. (2017). Chronic pain and chronic stress: two sides of the same coin? Chronic Stress, 1, 2470547017704763.
2. Asmundson, G. & Katz, J. (2009). Understanding the co-occurrence of anxiety disorders and chronic pain: state-of-the-art. Depression and Anxiety, 26(10), 888-901.
3. Bair, M. J., Robinson, R. L., Katon, W., et al. (2003). Depression and pain comorbidity: a literature review. *Archives of Internal Medicine*, *163*(20), 2433-2445.
4. Barrett, L., & Simmons, W. (2015). Interoceptive predictions in the brain. *Nature Reviews Neuroscience*, *16*(7), 419-429.
5. Bomholt, S., Harbuz, M., Blackburn-Munro, G., et al. (2004). Involvement and role of the hypothalamo-pituitary-adrenal (HPA) stress axis in animal models of chronic pain and inflammation. *Stress*, *7*(1), 1-14.
6. Borges, D., Monteiro, R., Schmidt, A., et al. (2013). World soccer cup as a trigger of cardiovascular events. Arquivos Brasileiros de Cardiologia, 100, 546-552.
7. Bruehl, S., Morris, M. C., & Al'Absi, M. (2022). Stress-induced analgesia: an evaluation of effects on temporal summation of pain and the role of endogenous opioid mechanisms. *Pain Reports*, *7*(2), e987.
8. Burns, J., Quartana, P., Gilliam, W., et al. (2008). Effects of anger suppression on pain severity and pain behaviors among chronic pain patients: evaluation of an ironic process model. Health Psychology, 27(5), 645.
9. Burston, J. J., Valdes, A. M., Woodhams, S. G., et al. (2019). The impact of anxiety on chronic musculoskeletal pain and the role of astrocyte activation. Pain, 160(3), 658-669.

10. Bushnell, M. C., Čeko, M., & Low, L. (2013). Cognitive and emotional control of pain and its disruption in chronic pain. Nature Reviews Neuroscience, 14(7), 502-511.
11. Butler, R. K., & Finn, D. P. (2009). Stress-induced analgesia. *Progress in Neurobiology*, *88*(3), 184-202.
12. Carpenter, S. (2012). That gut feeling. APA Monitor on Psychology, 43(8), 50.
13. Carter L., McNeil D., Vowles K., et al. (2002). Effects of emotion on pain reports, tolerance and physiology. Pain Research and Management, 7(1), 21-30.
14. Channel Action 7 News New Mexico, KOAT.com (2012, July 17). Man lifts car off 3-year-old child [Video]. YouTube.
15. Chapman, B. P., Fiscella, K., Kawachi, I., et al. (2013). Emotion suppression and mortality risk over a 12-year follow-up. *Journal of Psychosomatic Research*, *75*(4), 381-385.
16. Corcoran, L., Roche, M., & Finn, D. P. (2015). The role of the brain's endocannabinoid system in pain and its modulation by stress. International Review of Neurobiology, 125, 203-255.
17. Cross, M. P., Acevedo, A. M., Leger, K. et al. (2023). How and why could smiling influence physical health? A conceptual review. Health Psychology Review, 17(2), 321-343.
18. Dahan, A., van Velzen, M., & Niesters, M. (2014). Comorbidities and the complexities of chronic pain. *Anesthesiology*, *121*(4), 675-677.
19. De La Rosa, J, Brady, B., Ibrahim, M., et al. (2024). Co-occurrence of chronic pain and anxiety/depression symptoms in US adults: prevalence, functional impacts, and opportunities. *Pain*, *165*(3), 666-673.
20. Dosenbach, N. U., Raichle, M., & Gordon, E. M. (2024). The brain’s cingulo-opercular action-mode network. *PsyArXiv [Preprint]*
21. Dunbar, R. I., Baron, R., Frangou, A., et al. (2012). Social laughter is correlated with an elevated pain threshold. *Proceedings of the Royal Society B: Biological Sciences*, *279*(1731), 1161-1167.
22. Ferdousi, M., & Finn, D. P. (2018). Stress-induced modulation of pain: role of the endogenous opioid system. Progress in brain research, 239, 121-177.
23. Fernandez, E., & Turk, D. C. (1992). Sensory and affective components of pain: separation and synthesis. Psychological Bulletin, 112(2), 205.
24. Finan, P. H., & Garland, E. L. (2015). The role of positive affect in pain and its treatment. *The Clinical Journal of Pain*, *31*(2), 177-187.
25. Fuchs, P. N., Peng, Y. B., Boyette-Davis, J. A., et al. (2014). The anterior cingulate cortex and pain processing. *Frontiers in Integrative Neuroscience*, *8*, 35.
26. Garofalo, J. P., Robinson, R. C., & Gatchel, R. J. (2006). Hypothalamic–Pituitary–Adrenocortical Axis Dysregulation in Acute Temporomandibular Disorder and Low Back Pain: A Marker for Chronicity? 1. *Journal of Applied Biobehavioral Research*, *11*(3-4), 166-178.
27. Gatchel, R., Peng, Y., Peters, M. et al. (2007). The biopsychosocial approach to chronic pain: scientific advances and future directions. *Psychological Bulletin*, *133*(4), 581
28. Gilam, G., Gross, J. J., Wager, T. D., et al. (2020). What is the relationship between pain and emotion? Bridging constructs and communities. *Neuron*, *107*(1), 17-21.
29. Haack, M., Simpson, N., Sethna, N., et al. (2020). Sleep deficiency and chronic pain: potential underlying mechanisms and clinical implications. *Neuropsychopharmacology*, *45*(1), 205-216.
30. Hadhazy, A. (2010). Think twice: how the gut’s “second brain” influences mood and well-being. Scientific American, 12, 2010.
31. Hannibal, K. E., & Bishop, M. D. (2014). Chronic stress, cortisol dysfunction, and pain: a psychoneuroendocrine rationale for stress management in pain rehabilitation. Physical Therapy, 94(12), 1816-1825.

32. Hallegraeff, J., Kan, R., van Trijffel, E., et al. (2020). State anxiety improves prediction of pain and pain-related disability after 12 weeks in patients with acute low back pain: a cohort study. *Journal of Physiotherapy*, *66*(1), 39-44
33. Hermesdorf, M., Berger, K., Baune, B. et al. (2016). Pain sensitivity in patients with major depression: differential effect of pain sensitivity measures, somatic cofactors, and disease characteristics. The Journal of Pain, 17(5), 606-616.
34. Hitchcock, E., Hassett, A. L., & Wager, T. D. (2019). Effects of positive emotion on pain: Mechanisms and interventions. In J. Gruber (Ed.), The Oxford handbook of positive emotion and psychopathology (pp. 444–452). Oxford University Press.
35. Hooten, W. M. (2016). Chronic pain and mental health disorders: shared neural mechanisms, epidemiology, and treatment. *Mayo Clinic Proceedings*. 91(7): 955-970
36. IsHak, W., Wen, R., Naghdechi, L., et al. (2018). Pain and depression: a systematic review. Harvard Review of Psychiatry, 26(6), 352-363.
37. Jaracz, J., Gattner, K., Jaracz, K., et al (2016). Unexplained painful physical symptoms in patients with major depressive disorder: prevalence, pathophysiology and management. CNS Drugs, 30(4), 293-304.
38. Jennings, E. M., Okine, B., Roche, M., et al. (2014). Stress-induced hyperalgesia. Progress in Neurobiology, 121, 1-18.
39. Keefe, F. J., Lumley, M., Anderson, T., et al. (2001). Pain and emotion: new research directions. Journal of Clinical Psychology, 57(4), 587-607.
40. Kim, S., Lee, J., & Boone, D. (2022). Protective and risk factors at the intersection of chronic pain, depression, anxiety, and somatic amplification: a latent profile approach. Journal of Pain Research, 1107-1121.
41. Lapierre, S. S., Baker, B. D., & Tanaka, H. (2019). Effects of mirthful laughter on pain tolerance: A randomized controlled investigation. *Journal of bodywork and movement therapies*, *23*(4), 733-738
42. Lindquist, K. A., Wager, T. D., Kober, H., et al. (2012). The brain basis of emotion: a meta-analytic review. Behavioral and Brain Sciences, 35(3), 121-143.
43. Linton, S. J., & Bergbom, S. (2011). Understanding the link between depression and pain. Scandinavian Journal of Pain, 2(2), 47-54.
44. Liu, Y. Z., Wang, Y. X., & Jiang, C. L. (2017). Inflammation: the common pathway of stress-related diseases. *Frontiers in Human Neuroscience*, *11*, 316.
45. Lopes-Júnior, L. C., Bomfim, E., Olson, K., et al. (2020). Effectiveness of hospital clowns for symptom management in paediatrics: systematic review of randomised and non-randomised controlled trials. *BMJ*, 371, m4290.
46. Lumley, M., Cohen, J., Borszcz, G., et al. (2011). Pain and emotion: a biopsychosocial review of recent research. Journal of Clinical Psychology, 67(9), 942-968.
47. Lunde, C. E., & Sieberg, C. B. (2020). Walking the tightrope: a proposed model of chronic pain and stress. Frontiers in Neuroscience, 14, 270.
48. Martin, E. I., Ressler, K. J., Binder, E., et al. (2009). The neurobiology of anxiety disorders: brain imaging, genetics, and psychoneuroendocrinology. *The Psychiatric clinics of North America*, *32*(3), 549.
49. Martucci, K. T., & Mackey, S. C. (2018). Neuroimaging of pain: human evidence and clinical relevance of central nervous system processes and modulation. *Anesthesiology*, *128*(6), 1241.
50. Mason, I. (2013). Laughing Pain Away. Medical News Today. Medical News Today.
51. Melzack, R. (2001). Pain and the neuromatrix in the brain. Journal of dental education, 65(12), 1378-1382.

52. Mittleman, M., & Mostofsky, E. (2011). Physical, psychological and chemical triggers of acute cardiovascular events: preventive strategies. Circulation, 124(3), 346-354.
53. Mund, M., & Mitte, K. (2012). The costs of repression: a meta-analysis on the relation between repressive coping and somatic diseases. Health Psychology, 31(5), 640.
54. Neugebauer, V. (2015). Amygdala pain mechanisms. *Pain Control*, 261-284.
55. Ogino, Y., Nemoto, H., Inui, K., et al. (2007). Inner experience of pain: imagination of pain while viewing images showing painful events forms subjective pain representation in human brain. Cerebral Cortex, 17(5), 1139-1146.
56. Pérez-Aranda, A., Hofmann, J., Feliu-Soler, A., et al. (2019). Laughing away the pain: A narrative review of humour, sense of humour and pain. *European Journal of Pain*, *23*(2), 220-233.
57. Peters, M. L. (2015). Emotional and cognitive influences on pain experience. *Modern Trends in Pharmacopsychiatry*, *30*, 138-152.
58. Ren, K., & Dubner, R. (2009). Descending control mechanisms, Science of Pain. Edited by Basbaum AI, Bushnell MC.
59. Ressler, K. J., & Mayberg, H. S. (2007). Targeting abnormal neural circuits in mood and anxiety disorders: from the laboratory to the clinic. *Nature Neuroscience*, *10*(9), 1116-1124.
60. Rhudy, J. L., & Meagher, M. W. (2000). Fear and anxiety: divergent effects on human pain thresholds. Pain, 84(1), 65-75.
61. Rhudy, J. L., & Meagher, M. W. (2001). The role of emotion in pain modulation. Current Opinion in Psychiatry, 14(3), 241-245.
62. Roy, M., Piché, M., Chen, J. I., et al. (2009). Cerebral and spinal modulation of pain by emotions. Proceedings of the National Academy of Sciences, 106(49), 20900-20905.
63. Russo, S. J., & Nestler, E. (2013). The brain reward circuitry in mood disorders. *Nature Reviews Neuroscience*, *14*(9), 609-625.
64. Schreckenberger, M., Siessmeier, T., Viertmann, A., et al. (2005). The unpleasantness of tonic pain is encoded by the insular cortex. Neurology, 64(7), 1175-1183.
65. Shaw, W., Labott-Smith, S., Burg, M. et al. (2018). Stress effects on the body. American Psychological Association.
66. Sheng, J., Liu, S., Wang, Y., et al. (2017). The link between depression and chronic pain: neural mechanisms in the brain. Neural Plasticity, 2017(1), 9724371.
67. Smith, M. T., Edwards, R. R., Robinson, R. C., et al. (2004). Suicidal ideation, plans, and attempts in chronic pain patients: factors associated with increased risk. *Pain*, *111*(1-2), 201-208.
68. Strobel, C., Hunt, S., Sullivan, R., et al. (2014). Emotional regulation of pain: the role of noradrenaline in the amygdala. Science China Life Sciences, 57, 384-390.
69. Talbot, K., Madden, V. J., Jones, S. L., et al. (2019). The sensory and affective components of pain: are they differentially modifiable dimensions or inseparable aspects of a unitary experience? A systematic review. *British Journal of Anaesthesia*, *123*(2), e263-e272.
70. Tan, G., Jensen, M. P., Thornby, J., & Sloan, P. A. (2008). Negative emotions, pain, and functioning. Psychological Services, 5(1), 26.
71. Tang, N. & Crane, C. (2006). Suicidality in chronic pain: a review of the prevalence, risk factors and psychological links. *Psychological Medicine*, *36*(5), 575-586.
72. Tanriverdi, F., Karaca, Z., Unluhizarci, K., et al. (2007). The hypothalamo–pituitary–adrenal axis in chronic fatigue syndrome and fibromyalgia syndrome. *Stress*, *10*(1), 13-25.
73. Thomas Cheng, H. (2010). Spinal cord mechanisms of chronic pain and clinical implications. *Current pain and headache reports*, *14*, 213-220.
74. Tsang, A., Von Korff, M., Lee, S., et al. (2008). Common chronic pain conditions in developed and developing countries: gender and age differences and comorbidity with depression-anxiety disorders. *The Journal of Pain*, *9*(10), 883-891.

75. Tse, M., Lo, A., Cheng, T., et al. (2010). Humor therapy: relieving chronic pain and enhancing happiness for older adults. *Journal of Aging Research*, *2010*(1), 343574.
76. Vastag, B. (2003). Scientists find connections in the brain between physical and emotional pain. JAMA, 290(18), 2389-2390.
77. Veinante, P., Yalcin, I., & Barrot, M. (2013). The amygdala between sensation and affect: a role in pain. *Journal of Molecular Psychiatry*, *1*, 1-14.
78. Villemure, C., & Schweinhardt, P. (2010). Supraspinal pain processing: distinct roles of emotion and attention. *The Neuroscientist*, *16*(3), 276-284.
79. Wiech, K., & Tracey, I. (2009). The influence of negative emotions on pain: behavioral effects and neural mechanisms. *Neuroimage*, *47*(3), 987-994.
80. Wilbert-Lampen, U., Leistner, D., Greven, S., et al. (2008). Cardiovascular events during World Cup soccer. New England Journal of Medicine, 358(5), 475-483.
81. Wyns, A., Hendrix, J., Lahousse, A., et al. (2023). The biology of stress intolerance in patients with Chronic Pain—State of the art and future directions. *Journal of Clinical Medicine*, *12*(6), 2245.
82. Yang, S., & Chang, M. C. (2019). Chronic pain: structural and functional changes in brain structures and associated negative affective states. *International Journal of Molecular Sciences*, *20*(13), 3130.
83. Yaribeygi, H., Panahi, Y., Sahraei, H., et al. (2017). The impact of stress on body function: A review. *EXCLI journal*, *16*, 1057.
84. Yavuz, B., Aydinlar, E., Dikmen, P. et al. (2013). Association between somatic amplification, anxiety, depression, stress and migraine. The journal of headache and pain, 14, 1-6.
85. Yilmaz P, Diers M, Diener S, et al. (2010). Brain correlates of stress-induced analgesia. PAIN, 151(2), 522-529.

CHAPTER 6

1. Arntz, A., & Claassens, L. (2004). The meaning of pain influences its experienced intensity. *Pain*, *109*(1-2), 20-25.
2. Atlas L & Wager T. (2012). How expectations shape pain. Neuroscience Letters, 520(2), 140-148.
3. Baker, N. A., Polhemus, A. H., Ospina, E. H., et al. (2022). The state of science in the use of virtual reality in the treatment of acute and chronic pain: a systematic scoping review. The Clinical Journal of Pain, 38(6), 424-441.
4. Baldauf D, Desimone R (2014). "Neural mechanisms of object-based attention." Science. 344 (6182): 424–427.
5. Bantick, S. J., Wise, R. G., Ploghaus, A., et al. (2002). Imaging how attention modulates pain in humans using functional MRI. *Brain*, *125*(2), 310-319.
6. Bascour-Sandoval, C., Salgado-Salgado, S., Gómez-Milán, E., et al. (2019). Pain and distraction according to sensory modalities: Current findings and future directions. Pain Practice, 19(7), 686-702.
7. Basten-Günther, J., Peters, M., & Lautenbacher, S. (2019). Optimism and the experience of pain: a systematic review. *Behavioral Medicine*, *45*(4), 323-339.
8. Brouwer B., Waardenburg S., Jacobs C., et al. (2020). Biopsychosocial baseline values of 15000 patients suffering from chronic pain: Dutch DataPain study. Reg. Anesth. Pain Med. 45 774–782.
9. Bushnell, M. C., Čeko, M., & Low, L. A. (2013). Cognitive and emotional control of pain and its disruption in chronic pain. Nature Reviews Neuroscience, 14(7), 502-511.
10. Cacioppo, J., Cacioppo, S., & Gollan, J. (2014). The negativity bias: conceptualization, quantification, and individual differences. *Behavioral & Brain Sciences*, *37*(3).

11. Carpenter, S. (2001). Sights unseen. Monitor on Psychology, 32(4), 54-57.
12. Christensen, S. W. M., Almsborg, H., Vain, T. et al. (2023). The Effect of Virtual Reality on Cold Pain Sensitivity in Patients with Fibromyalgia and Pain-Free Individuals: A Randomized Crossover Study. Games for Health Journal, 12(4), 295-301.
13. Chuan, A., Zhou, J. J., Hou, R. et al. (2021). Virtual reality for acute and chronic pain management in adult patients: a narrative review. Anaesthesia, 76(5), 695-704.
14. Comizio, C. (2025). Ranking the Most Painful Medical Conditions. U.S. News and World Report.
15. Critchley, H. D., & Harrison, N. A. (2013). Visceral influences on brain and behavior. Neuron, 77(4), 624-638.
16. Cromie, W. (2002). Meditation Changes Temperatures. The Harvard Gazette. April 18, 2002.
17. Dehaene, S. (2021). How we learn: Why brains learn better than any machine... for now. Penguin.
18. DeMore, M., & Cohen, L. L. (2005). Distraction for pediatric immunization pain: A critical review. *Journal of Clinical Psychology in Medical Settings*, *12*, 281-291.
19. Diener, E., & Chan, M. (2011). Happy people live longer: Subjective well-being contributes to health and longevity. *Applied Psychology: Health and Well-Being*, *3*(1), 1-43.
20. Fernandez, E., & Turk, D. C. (1989). The utility of cognitive coping strategies for altering pain perception: a meta-analysis. Pain, 38(2), 123-135.
21. Forte, A., Guliyeva, G., McLeod, H., et al. (2022). The impact of optimism on cancer-related and postsurgical cancer pain: a systematic review. *Journal of Pain and Symptom Management*, *63*(2), e203-e211
22. Galambos, A., Szabó, E., Nagy, Z., et al. (2019). A systematic review of structural and functional MRI studies on pain catastrophizing. Journal of Pain Research, 12, 1155–1178.
23. Garland, E. L. (2012). Pain processing in the human nervous system: a selective review of nociceptive and biobehavioral pathways. *Primary Care: Clinics in Office Practice*, *39*(3), 561-571.
24. González Aroca, J., Díaz, Á., Navarrete, C., et al. (2023). Fear-avoidance beliefs are Associated with Pain Intensity and Shoulder disability in adults with Chronic Shoulder Pain: a cross-sectional study. *Journal of Clinical Medicine*, *12*(10), 3376.
25. Goodin, B., & Bulls, H. (2013). Optimism and the experience of pain: benefits of seeing the glass as half full. *Current Pain and Headache Reports*, *17*, 1-9.
26. Griggs, S., & Walker, R. K. (2016). The role of hope for adolescents with a chronic illness: An integrative review. *Journal of Pediatric Nursing*, *31*(4), 404-421.
27. Gupta, A., Scott, K., & Dukewich, M. (2018). Innovative technology using virtual reality in the treatment of pain: does it reduce pain via distraction, or is there more to it?. Pain Medicine, 19(1), 151-159.
28. Hanssen, M., Peters, M., Vlaeyen, J. et al. (2013). Optimism lowers pain: evidence of the causal status and underlying mechanisms. *Pain*, *154*(1), 53-58
29. Irwin, M. (2008). Human psychoneuroimmunology: 20 years of discovery. Brain, Behavior, and Immunity, 22(2), 129-139.
30. Ito, T., Larsen, J., Smith, N., et al. (1998). Negative information weighs more heavily on the brain: the negativity bias in evaluative categorizations. *Journal of personality and social psychology*, *75*(4), 887.
31. Jameson, E., Trevena, J., & Swain, N. (2011). Electronic gaming as pain distraction. Pain Research and Management, 16, 27-32.
32. Judge, S., Clasey, J., Crofford, L., et al. (2020). Optimism and pain interference in aging women. *Annals of Behavioral Medicine*, *54*(3), 202-212.

33. Kiecolt-Glaser, J., McGuire, L., Robles, T. et al. (2002). Psychoneuroimmunology: psychological influences on immune function and health. Journal of consulting and clinical psychology, 70(3), 537.
34. Kiley Hamlin, J., Wynn, K., & Bloom, P. (2010). Three-month-olds show a negativity bias in their social evaluations. *Developmental Science*, *13*(6), 923-929.
35. Kreitz, C., Furley, P., Memmert, D., et al. (2015). Inattentional blindness and individual differences in cognitive abilities. *PLOS One*, *10*(8), e0134675.
36. Laranjeira, C., & Querido, A. (2022). Hope and optimism as an opportunity to improve the "positive mental health" demand. *Frontiers in psychology*, *13*, 827320.
37. Leung, L. (2012). Pain catastrophizing: an updated review. *Indian journal of psychological medicine*, *34*(3), 204-217.
38. Long, K., Kim, E., Chen, Y., et al. (2020). The role of hope in subsequent health and well-being for older adults: An outcome-wide longitudinal approach. Global Epidemiology, 2, 100018.
39. Lumley, M., Cohen, J., Borszcz, G., et al (2011). Pain and emotion: a biopsychosocial review of recent research. Journal of clinical psychology, 67(9), 942-968.
40. Luo, H., Cai, Z., Huang, Y., et al. (2021). Study on pain catastrophizing from 2010 to 2020: a bibliometric analysis via CiteSpace. *Frontiers in psychology*, *12*, 759347.
41. Murphy, J., McKellar, J, Raffa, S. et al. (2014). *Cognitive behavioral therapy for chronic pain among veterans: Therapist manual*. Washington, DC: Department of Veterans Affairs
42. Moseley, G., Zalucki, N., Birklein, F., et al. (2008). Thinking about movement hurts: the effect of motor imagery on pain and swelling in people with chronic arm pain. *Arthritis Care & Research: Official Journal of the American College of Rheumatology*, *59*(5), 623-631.
43. Petersen, S. & Posner, M. (2012). The attention system of the human brain: 20 years after. *Annual Review of Neuroscience*, *35*(1), 73-89.
44. Peyron, R., García-Larrea, L., Grégoire, M. C., et al. (1999). Haemodynamic brain responses to acute pain in humans: sensory and attentional networks. *Brain*, *122*(9), 1765-1780.
45. Quartana, P., Campbell, C., & Edwards, R. (2009). Pain catastrophizing: a critical review. *Expert Review of Neurotherapeutics*, *9*(5), 745-758.
46. Richter, C. (1957). On the phenomenon of sudden death in animals and man. *Psychosomatic Medicine*, *19*(3), 191-198.
47. Rischer, K., González-Roldán, A., Montoya, P., et al. (2020). Distraction from pain: The role of selective attention and pain catastrophizing. European Journal of Pain, 24(10), 1880-1891.
48. Rozanski, A., Bavishi, C., Kubzansky, L. et al. (2019). Association of optimism with cardiovascular events and all-cause mortality: a systematic review and meta-analysis. *JAMA Network Open*, *2*(9), e1912200
49. Salo, E., Salmela, V., Salmi, J., et al. (2017). Brain activity associated with selective attention, divided attention and distraction. Brain research, 1664, 25-36.
50. Sewell, M., Churilov, L., Mooney, S., et al. (2018). Chronic pelvic pain–pain catastrophizing, pelvic pain and quality of life. *Scandinavian Journal of Pain*, *18*(3), 441-448.
51. Simic, K., Savic, B., & Knezevic, N. (2024). Pain catastrophizing: How far have we come. *Neurology International*, *16*(3), 483-501.
52. Simons, D., & Chabris, C. (1999). Gorillas in Our Midst: Sustained Inattentional Blindness for Dynamic Events. Perception, 28(9), 1059-1074.
53. Smith, K., Wang, Y., & Colloca, L. (2022). Impact of virtual reality technology on pain and anxiety in pediatric burn patients: a systematic review and meta-analysis. *Frontiers in Virtual Reality*, *2*, 751735.

54. Subnis, U., Starkweather, A., & Menzies, V. (2016). A current review of distraction-based interventions for chronic pain management. *European Journal of Integrative Medicine*, *8*(5), 715-722
55. Sullivan, M. J., Bishop, S., & Pivik, J. (1995). The pain catastrophizing scale: development and validation. *Psychological Assessment*, *7*(4), 524.
56. Torta, D. M., Legrain, V., Mouraux, A., et al. (2017). Attention to pain! A neurocognitive perspective on attentional modulation of pain in neuroimaging studies. Cortex, 89, 120-134.
57. TRS Clips. (2023, April 5). Unbelievable Tantric Tibetan Ritual: Monk Explains Tummo Meditation [Video]. YouTube. https://www.youtube.com/watch?v=-MUujxAvmtM
58. Villemure, C. & Bushnell, M. (2002). Cognitive modulation of pain: how do attention and emotion influence pain processing? Pain, 95(3), 195-199.
59. Volcheck, M. M., Graham, S. M., Fleming, K. et al. (2023). Central sensitization, chronic pain, and other symptoms: Better understanding, better management. Cleveland Clinic journal of medicine, 90(4), 245-254.
60. Wiech, K. (2016). Deconstructing the sensation of pain: The influence of cognitive processes on pain perception. Science, 354(6312), 584-587.
61. Ziadni, M. S., Sturgeon, J. A., & Darnall, B. D. (2018). The relationship between negative metacognitive thoughts, pain catastrophizing and adjustment to chronic pain. *European Journal of Pain*, *22*(4), 756-762.

CHAPTER 7

1. Allen, S., Gilbody, S., Atkin, K., et al. (2020). The associations between loneliness, social exclusion and pain in the general population: AN= 502,528 cross-sectional UK Biobank study. Journal of Psychiatric Research, 130, 68-74.
2. Ardiel, E., & Rankin, C. (2010). The importance of touch in development. *Paediatrics & child health*, *15*(3), 153-156.
3. Austin, D. (2021). What You're Saying When You Give Someone the Silent Treatment. The Atlantic.
4. Brennan, A., Marshall-Lucette, S., Ayers, S., et al. (2007). A qualitative exploration of the Couvade syndrome in expectant fathers. Journal of reproductive and infant psychology, 25(1), 18-39.
5. Bushnell, M., Čeko, M., & Low, L. (2013). Cognitive and emotional control of pain and its disruption in chronic pain. Nature Reviews Neuroscience, 14(7), 502-511.
6. Cacioppo, J., Cacioppo, S., Capitanio, J. et al. (2015). The neuroendocrinology of social isolation. *Annual Review of Psychology*, *66*(1), 733-767.
7. Cacioppo, J., & Cacioppo, S. (2014). Older adults reporting social isolation or loneliness show poorer cognitive function 4 years later. *Evidence-Based Nursing*, *17*(2), 59-60.
8. Cacioppo, S., Grippo, A. London, S., et al. (2015). Loneliness: Clinical import and interventions. *Perspectives on Psychological Science*, *10*(2), 238-249.
9. Cady, S., & Jones, G. (1997). Massage therapy as a workplace intervention for reduction of stress. *Perceptual and Motor Skills*, *84*(1), 157-158.
10. Calati, R., Ferrari, C., Brittner, M., et al. (2019). Suicidal thoughts and behaviors and social isolation: A narrative review of the literature. Journal of Affective Disorders, 245, 653-667.
11. Calloway, K. (2019). I Spent 16 Months in Solitary Confinement and Now I'm Fighting to End It. ACLU. July 3, 2019.
12. Carrillo, M., Han, Y., Migliorati, F., et al. (2019). Emotional mirror neurons in the rat's anterior cingulate cortex. Current Biology, 29(8), 1301-1312.

13. Coan, J., Schaefer, H., & Davidson, R. (2006). Lending a hand: Social regulation of the neural response to threat. Psychological Science, 17(12), 1032-1039.
14. Comaford, C. (2019). What Being Excluded Does to Your Brain. Forbes. March 16, 2019.
15. DeWall, C., MacDonald, G., Webster, G. et al. (2010). Acetaminophen reduces social pain: Behavioral and neural evidence. Psychological Science, 21(7), 931-937.
16. Dunbar, R. (2010). The social role of touch in humans and primates: behavioural function and neurobiological mechanisms. Neuroscience & Biobehavioral Reviews, 34(2), 260-268.
17. Dunbar, R. (2022). Virtual touch and the human social world. Current Opinion in Behavioral Sciences, 43, 14-19.
18. Eckstein, M., Mamaev, I., Ditzen, B., et al. (2020). Calming effects of touch in human, animal, and robotic interaction—scientific state-of-the-art and technical advances. *Frontiers in Psychiatry*, *11*, 555058.
19. Eisenberger, N. (2012). The neural bases of social pain: evidence for shared representations with physical pain. Psychosomatic Medicine, 74(2), 126-135.
20. Eisenberger, N. & Lieberman, M. (2013). Why it hurts to be left out: The neurocognitive overlap between physical and social pain. In The social outcast (pp. 109-127). Psychology Press.
21. Ellingsen, D., Leknes, S., Løseth, G., et al. (2016). The neurobiology shaping affective touch: expectation, motivation, and meaning in the multisensory context. *Frontiers in Psychology*, *6*, 1986.
22. Field, T., Peck, M., Krugman, S., et al. (1998). Burn injuries benefit from massage therapy. *The Journal of burn care & rehabilitation*, *19*(3), 241-244.
23. Field, T., Schanberg, S., Scafidi, F., et al. (1986). Tactile/kinesthetic stimulation effects on preterm neonates. *Pediatrics*, *77*(5), 654-658.
24. Floud, S., Balkwill, A., Canoy, D., et al. (2014). Marital status and ischemic heart disease incidence and mortality in women: a large prospective study. BMC Medicine, 12, 1-9.
25. Hart, S., Field, T., Hernandez-Reif, M., et al. (2001). Anorexia nervosa symptoms are reduced by massage therapy. *Eating Disorders*, *9*(4), 289-299.
26. Hobson, J., Moody, M., Sorge, R., et al. (2022). The neurobiology of social stress resulting from Racism: Implications for pain disparities among racialized minorities. *Neurobiology of Pain*, *12*, 100101.
27. Holt-Lunstad, J., Smith, T, Baker, M., et al. (2015) Loneliness and Social Isolation as Risk Factors for Mortality: A Meta-Analytic Review. Perspectives on Psychological Science, 10(2): 227-237.
28. Holt-Lunstad, J., Smith, T., & Layton, J. (2010). Social relationships and mortality risk: A meta-analytic review. PLoSMedicine, 7(7):e1000316.
29. Ironson, G., Field, T., Scafidi, F., et al. (1996). Massage therapy is associated with enhancement of the immune system's cytotoxic capacity. *International Journal of Neuroscience*, *84*(1-4), 205-217.
30. Jauniaux, J., Khatibi, A., Rainville, P., et al. (2019). A meta-analysis of neuroimaging studies on pain empathy: investigating the role of visual information and observers' perspective. Social cognitive and affective neuroscience, 14(8), 789-813.
31. Kazmierczak, M., Kielbratowska, B., Pastwa-Wojciechowska, B., et al. (2013). Couvade syndrome among Polish expectant fathers. Medical science monitor: international medical journal of experimental and clinical research, 19, 132.
32. Kiecolt-Glaser, J. K. (2018). Marriage, divorce, and the immune system. *American Psychologist*, *73*(9), 1098.
33. Kiser, D., SteemerS, B., Branchi, I., et al. (2012). The reciprocal interaction between serotonin and social behaviour. Neuroscience & Biobehavioral Reviews, 36(2), 786-798.

34. Klein, H. (1991). Couvade syndrome: male counterpart to pregnancy. The International Journal of Psychiatry in Medicine, 21(1), 57-69.
35. Kraus, J., Frick, A., Roman, R., et al. (2019). Soothing the emotional brain: modulation of neural activity to personal emotional stimulation by social touch. *Social cognitive and affective neuroscience*, *14*(11), 1179-1185.
36. Kross, E., Berman, M., Mischel, W., et al. (2011). Social rejection shares somatosensory representations with physical pain. Proceedings of the National Academy of Sciences, 108(15), 6270-6275.
37. Lamm, C., Decety, J., & Singer, T. (2011). Meta-analytic evidence for common and distinct neural networks associated with directly experienced pain and empathy for pain. *Neuroimage*, *54*(3), 2492-2502.
38. Lieberman, M., & Eisenberger, N. (2006). A pain by any other name (rejection, exclusion, ostracism) still hurts the same: The role of dorsal anterior cingulate cortex in social and physical pain. Social Neuroscience, 167-187.
39. Lo Coco, G., Melchiori, F., Oieni, V., et al. (2019). Group treatment for substance use disorder in adults: A systematic review and meta-analysis of randomized-controlled trials. Journal of Substance Abuse Treatment, 99, 104–116.
40. Loeffler, A., & Steptoe, A. (2021). Bidirectional longitudinal associations between loneliness and pain, and the role of inflammation. *Pain*, *162*(3), 930-937.
41. Loggia, M., Mogil, J., & Bushnell, M. (2008). Empathy hurts: compassion for another increases both sensory and affective components of pain perception. PAIN, 136(1-2), 168-176.
42. Nanavaty N, Walsh K, Boring B, et al. (2023). Acute ostracism-related pain sensitization in the context of accumulated lifetime experiences of ostracism. The Journal of Pain, 24(7), 1229-1239.
43. National Academies of Sciences, Engineering, and Medicine. (2020). Social Isolation and Loneliness in Older Adults: Opportunities for the Health Care System. Washington, DC: The National Academies Press.
44. Office of the U.S. Surgeon General (2023). Our Epidemic of Loneliness and Isolation: The U.S. Surgeon General's Advisory on the Healing Effects of Social Connection and Community.
45. Petitte, T., Mallow, J., Barnes, E., et al. (2015). A systematic review of loneliness and common chronic physical conditions in adults. *The Open Psychology Journal*, *8*(Suppl 2), 113.
46. Rein, B., Jones, E., Tuy, S., et al. (2022). Protocols for the social transfer of pain and analgesia in mice. STAR protocols, 3(4), 101756.
47. Sbarra, D. A., Hasselmo, K., & Bourassa, K. J. (2015). Divorce and health: Beyond individual differences. *Current directions in psychological science*, *24*(2), 109-113.
48. Scafidi, F. A., Field, T. M., Schanberg, S. M., et al. (1986). Effects of tactile/kinesthetic stimulation on the clinical course and sleep/wake behavior of preterm neonates. *Infant behavior and development*, *9*(1), 91-105.
49. Shankar, A., McMunn, A., Banks, J., et al. (2011). Loneliness, social isolation, and behavioral and biological health indicators in older adults. Health psychology, 30(4), 377.
50. Shulman, K. R., & Jones, G. E. (1996). The effectiveness of massage therapy intervention on reducing anxiety in the workplace. *The Journal of Applied Behavioral Science*, *32*(2), 160-173.
51. Slavich, G., Shields, G., Deal, B., et al. (2019). Alleviating social pain: a double-blind, randomized, placebo-controlled trial of forgiveness and acetaminophen. *Annals of Behavioral Medicine*, *53*(12), 1045-1054.
52. Smith, D. (2018). Neuroscientists make a case against solitary confinement. Scientific American, 9.
53. Smith, M., Asada, N., & Malenka, R. (2021). Anterior cingulate inputs to nucleus accumbens control the social transfer of pain and analgesia. Science, 371(6525), 153-159.

54. Timmers I, Park A, Fischer M, et al. (2018). Is empathy for pain unique in its neural correlates? A meta-analysis of neuroimaging studies of empathy. Frontiers in Behavioral Neuroscience, 12, 406760.
55. Tracy, K., & Wallace, S. (2016). Benefits of peer support groups in the treatment of addiction. *Substance Abuse and Rehabilitation*, 143-154.
56. Trang, T., Al-Hasani, R., Salvemini, D., et al. (2015). Pain and poppies: the good, the bad, and the ugly of opioid analgesics. *Journal of Neuroscience*, *35*(41), 13879-13888
57. Wager, T., Atlas, L., Lindquist, M. et al. (2013). An fMRI-based neurologic signature of physical pain. New England Journal of Medicine, 368(15), 1388-1397.
58. Walsh, K., Boring, B., Nanavaty, N., et al. (2022). Lifetime ostracism experiences and mechanisms of pain. Frontiers in Pain Research, 3, 1037472.
59. Widström, A., Brimdyr, K., Svensson, K., et al. (2019). Skin-to-skin contact the first hour after birth, underlying implications and clinical practice. *Acta Paediatrica*, *108*(7), 1192-1204.
60. Williams, K. (2002). Ostracism: The power of silence. Guilford Press.
61. Williams, K. (2011). The pain of exclusion. Scientific American Mind, 21(6), 30-37.
62. Wolf, L, & Davis, M. (2014) Loneliness, daily pain, and perceptions of interpersonal events in adults with fibromyalgia. Health Psychology, 33(9): 929-237.
63. Zaki, J., Wager, T., Singer, T., et al (2016). The anatomy of suffering: understanding the relationship between nociceptive and empathic pain. Trends in Cognitive Sciences, 20(4), 249-259.

CHAPTER 8.

1. Adverse Childhood Experiences (2019). US Centers for Disease Control. National Estimates based on 2017 BRFSS; Vital Signs, MMWR November 2019.
2. Anger, J., Case, L., Baranowski, A., et al. (2024). Pain mechanisms in the transgender individual: a review. *Frontiers in Pain Research*, *5*, 1241015.
3. Arnsten, A. F., Raskind, M. A., Taylor, F. B., et al. (2015). The effects of stress exposure on prefrontal cortex: Translating basic research into successful treatments for post-traumatic stress disorder. *Neurobiology of stress*, *1*, 89-99.
4. Asmundson, G., Coons, M., Taylor, S., et al. (2002). PTSD and the experience of pain: research and clinical implications of shared vulnerability and mutual maintenance models. The Canadian Journal of Psychiatry, 47(10), 930-937.
5. Banco, D., Chang, J., Talmor, N., et el. (2022). Sex and race differences in the evaluation and treatment of young adults presenting to the emergency department with chest pain. Journal of the American Heart Association, 11(10), e024199.
6. Bartley, E. & Fillingim, R. (2013). Sex differences in pain: a brief review of clinical and experimental findings. *British Journal of Anaesthesia*, *111*(1), 52-58.
7. Bever, L. (2022). From heart disease to IUDs: How doctors dismiss women's pain. The Washington Post.
8. Bosco, M., Gallinati, J., & Clark, M. (2013). Conceptualizing and treating comorbid chronic pain and PTSD. *Pain Research and Treatment*, *2013*(1), 174728.
9. Bremner, J. D. (2006). Traumatic stress: effects on the brain. *Dialogues in Clinical Neuroscience*, *8*(4), 445-461.
10. Bussières, A., Hancock, M., Elklit, A., et al. (2023). Adverse childhood experience is associated with an increased risk of reporting chronic pain in adulthood: a systematic review and meta-analysis. European Journal of Psychotraumatology, 14(2), 2284025.

11. Calderone, K. (1990). The influence of gender on the frequency of pain and sedative medication administered to postoperative patients. Sex Roles, 23, 713-725.
12. Casale, R., Atzeni, F., Bazzichi, L., et al. (2021). Pain in women: a perspective review on a relevant clinical issue that deserves prioritization. *Pain and Therapy*, *10*, 287-314.
13. Chen, E., Shofer, F., Dean, A., et al. (2008). Gender disparity in analgesic treatment of emergency department patients with acute abdominal pain. *Academic Emergency Medicine*, *15*(5), 414-418.
14. Coates, M. M., Ezzati, M., Robles Aguilar, G., et al. (2021). Burden of disease among the world's poorest billion people: An expert-informed secondary analysis of Global Burden of Disease estimates. *PloS One*, *16*(8), e0253073.
15. Cowley, E., Olenick, A., McNulty, K. et al. (2021). "Invisible sportswomen": the sex data gap in sport and exercise science research. Women in Sport and Physical Activity Journal, 29(2), 146-151.
16. Craig, K. D. (2015). Social communication model of pain. *Pain*, *156*(7), 1198-1199.
17. De-Diego-Cordero, R., Velasco-Dominguez, C., Aranda-Jerez, A., et al. (2024). The Spiritual Aspect of Pain: An Integrative Review. Journal of religion and health, 63(1), 159-184.
18. Egloff, N., Hirschi, A., & von Känel, R. (2013). Traumatization and chronic pain: a further model of interaction. *Journal of Pain Research*, 765-770.
19. Felitti, V. J. (2002). The relation between adverse childhood experiences and adult health: Turning gold into lead. *The Permanente Journal*, *6*(1), 44-47.
20. Felitti, V., Anda, R., Nordenberg, D., et al (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The Adverse Childhood Experiences (ACE) Study. American journal of preventive medicine, 14(4), 245-258.
21. Fenster, R., Lebois, L., Ressler, K., et al. (2018). Brain circuit dysfunction in post-traumatic stress disorder: from mouse to man. *Nature Reviews Neuroscience*, *19*(9), 535-551.
22. Gardner, S. (2022). Serena Williams describes near-death experience she had after giving birth to daughter Olympia. USA Today.
23. Gauntlett-Gilbert, J., & Wilson, S. (2013). Veterans and chronic pain. *British Journal of Pain*, *7*(2), 79-84.
24. Gibson, C. (2012). Review of posttraumatic stress disorder and chronic pain: the path to integrated care. *Journal of Rehabilitation Research and Development*, *49*(5), 753.
25. Givler, A., Bhatt, H., & Maani-Fogelman, P. A. (2020). The importance of cultural competence in pain and palliative care. StatPearls.
26. Glezerman, M. (2016). Gender medicine: The groundbreaking new science of gender-and sex-related diagnosis and treatment. Abrams.
27. Goubert, L., Vlaeyen, J., Crombez, G., et al. (2011). Learning about pain from others: an observational learning account. The Journal of Pain, 12(2), 167-174.
28. Goyal M., Kuppermann N., Cleary S. et al. (2015). Racial disparities in pain management of children with appendicitis in emergency departments. JAMA Pediatrics, 169(11), 996-1002.
29. Groenewald, C. B., Murray, C. B., & Palermo, T. M. (2020). Adverse childhood experiences and chronic pain among children and adolescents in the United States. *Pain reports*, *5*(5), e839.
30. Grol-Prokopczyk, H. (2017). Sociodemographic disparities in chronic pain, based on 12-year longitudinal data. Pain, 158(2), 313-322.
31. Ho, A., Chan, C., Leung, P., et al. (2013). Living and dying with dignity in Chinese society: perspectives of older palliative care patients in Hong Kong. *Age and Ageing*, *42*(4), 455-461.
32. Hobson, J, Moody, M., Sorge, R., et al. (2022). The neurobiology of social stress resulting from Racism: Implications for pain disparities among racialized minorities. *Neurobiology of Pain*, *12*, 100101.

33. Hoffman, K., Trawalter, S., Axt, J. et al. (2016). Racial bias in pain assessment and treatment recommendations, and false beliefs about biological differences between blacks and whites. Proceedings of the National Academy of Sciences, 113(16), 4296-4301.
34. Jenewein, J., Moergeli, H., Wittmann, L., et al. (2009). Development of chronic pain following severe accidental injury. Results of a 3-year follow-up study. *Journal of psychosomatic research*, *66*(2), 119-126.
35. Keefe, F. J., Lefebvre, J. C., Egert, J. et al. (2000). The relationship of gender to pain, pain behavior, and disability in osteoarthritis patients: the role of catastrophizing. Pain, 87(3), 325-334.
36. Kelly-Irving, M., Mabile, L., Grosclaude, P., et al (2013). The embodiment of adverse childhood experiences and cancer development: potential biological mechanisms and pathways across the life course. International journal of public health, 58, 3-11.
37. Todd, K. H., Deaton, C., D'adamo, A. P., et al. (2000). Ethnicity and analgesic practice. *Annals of Emergency Medicine*, *35*(1), 11-16.
38. Kiesel, L. (2017). Women and pain: Disparities in experience and treatment. Harvard Health Blog, 9.
39. Lenz, A. S., Henesy, R., & Callender, K. (2016). Effectiveness of seeking safety for co-occurring posttraumatic stress disorder and substance use. Journal of Counseling & Development, 94(1), 51-61.
40. Lew, H., Poole, J., Vanderploeg, R., et al. (2007). Program development and defining characteristics of returning military in a VA Polytrauma Network Site. Journal of Rehabilitation Research & Development, 44(7).
41. Lu, H., Hatfield, L. A., Al-Azazi, S., et al. (2024). Sex-based disparities in acute myocardial infarction treatment patterns and outcomes in older adults hospitalized across 6 high-income countries: an analysis from the International Health Systems Research Collaborative. *Circulation: Cardiovascular Quality and Outcomes*, *17*(3), e010144.
42. Lumley, M. A., Yamin, J., Pester, B. et al. (2022). Trauma matters: psychological interventions for comorbid psychosocial trauma and chronic pain. Pain, 163(4), 599-603.
43. Madigan, S., Deneault, A. A., Racine, N., et al. (2023). Adverse childhood experiences: a meta-analysis of prevalence and moderators among half a million adults in 206 studies. *World Psychiatry*, *22*(3), 463-471.
44. Maserejian, N. N., Link, C. L., Lutfey, K. L., et al. (2009). Disparities in physicians' interpretations of heart disease symptoms by patient gender: results of a video vignette factorial experiment. *Journal of Women's Health*, *18*(10), 1661-1667.
45. Mazure, C. M., & Jones, D. P. (2015). Twenty years and still counting: including women as participants and studying sex and gender in biomedical research. *BMC Women's Health*, *15*, 1-16.
46. McLean, S. A., Clauw, D. J., Abelson, J. et al. (2005). The development of persistent pain and psychological morbidity after motor vehicle collision: integrating the potential role of stress response systems into a biopsychosocial model. Psychosomatic Medicine, 67(5), 783-790.
47. Merone, L., Tsey, K., Russell, D., et al. (2022). Sex inequalities in medical research: a systematic scoping review of the literature. *Women's Health Reports*, *3*(1), 49-59.
48. Moeller-Bertram, T., Keltner, J., & Strigo, I. A. (2012). Pain and post-traumatic stress disorder–review of clinical and experimental evidence. Neuropharmacology, 62(2), 586-597.
49. Mogil, J. (2012). Sex differences in pain and pain inhibition: multiple explanations of a controversial phenomenon. *Nature Reviews Neuroscience*, *13*(12), 859-866.
50. Monnat, S., & Chandler, R. (2015). Long-term physical health consequences of adverse childhood experiences. *The Sociological Quarterly*, *56*(4), 723-752.

51. Morgan, L., & Aldington, D. (2020). Comorbid chronic pain and post-traumatic stress disorder in UK veterans: a lot of theory but not enough evidence. *British Journal of Pain*, *14*(4), 256-262.
52. Najavits, L. M., Krinsley, K., Waring, M. et al. (2018). A randomized controlled trial for veterans with PTSD and substance use disorder: Creating change versus seeking safety. Substance Use & Misuse, 53(11), 1788-1800.
53. Nanavaty, N., Walsh, K. T., Boring, B. et al. (2023). Acute ostracism-related pain sensitization in the context of accumulated lifetime experiences of ostracism. The Journal of Pain, 24(7), 1229-1239.
54. Neighmond, P. (2019). Women May Be More Adept Than Men at Discerning Pain. NPR. Aug. 26, 2019.
55. Ng, Q., Soh, A.., Loke, W., et al. (2019). Systematic review with meta-analysis: the association between post-traumatic stress disorder and irritable bowel syndrome. Journal of Gastroenterology and Hepatology, 34(1), 68-73.
56. Nicolson, K., Mills, S., Senaratne, D. et al. (2023). What is the association between childhood adversity and subsequent chronic pain in adulthood? A systematic review. BJA Open, 6, 100139.
57. Osborne, N., & Davis, K. (2022). Sex and gender differences in pain. In *International Review of Neurobiology*, 164, 277-307
58. Ostrom, C., Bair, E., Maixner, W., et al. (2017). Demographic predictors of pain sensitivity: results from the OPPERA study. The Journal of Pain, 18(3), 295-307.
59. Otis, J., Keane, T., & Kerns, R. (2003). An examination of the relationship between chronic pain and post-traumatic stress disorder. Journal of rehabilitation research and development, 40(5), 397-406.
60. Overstreet, D., Pester, B., Wilson, J., et al. (2023). The experience of BIPOC living with chronic pain in the USA: biopsychosocial factors that underlie racial disparities in pain outcomes, comorbidities, inequities, and barriers to treatment. Current Pain and Headache Reports, 27(1), 1-10.
61. Patitz, B., Anderson, M., & Najavits, L. (2015). An outcome study of Seeking Safety with rural community-based women. Journal of Rural Mental Health, 39(1), 54.
62. Peacock, S., & Patel, S. (2008). Cultural influences on pain. *Reviews in Pain*, *1*(2), 6-9.
63. Pierce, J., Harte, S., Afari, N., et al. (2023). Mediators of the association between childhood trauma and pain sensitivity in adulthood: a multidisciplinary approach to the study of chronic pelvic pain research network analysis. Pain, 164, 1995–2008.
64. Plagge, J. M., Lu, M. W., Lovejoy, T. I., et al. (2013). Treatment of comorbid pain and PTSD in returning veterans: A collaborative approach utilizing behavioral activation. *Pain Medicine*, *14*(8), 1164-1172.
65. Powelson, E. B., Mills, B., Henderson-Drager, W., et al. (2019). Predicting chronic pain after major traumatic injury. *Scandinavian Journal of Pain*, *19*(3), 453-464.
66. Powers, A., Fani, N., Pallos, A., et al. (2014). Childhood abuse and the experience of pain in adulthood: the mediating effects of PTSD and emotion dysregulation on pain levels and pain-related functional impairment. *Psychosomatics*, *55*(5), 491-499.
67. Rao, V. (2023). Childhood Trauma Can Lead to Chronic Pain. Healthy Women. Feb. 9, 2023.
68. Resick, P. A., Nishith, P., Weaver, T. L., et al. (2002). A comparison of cognitive-processing therapy with prolonged exposure and a waiting condition for the treatment of chronic posttraumatic stress disorder in female rape victims. *Journal of consulting and clinical psychology*, *70*(4), 867.
69. Ross, N., Gilbert, R., Torres, S., et al. (2020). Adverse childhood experiences: Assessing the impact on physical and psychosocial health in adulthood and the mitigating role of resilience. Child Abuse & Neglect, 103, 104440.

70. Salam, M. (2018). For Serena Williams, Childbirth Was a Harrowing Ordeal. She's Not Alone. The New York Times, 751-60.
71. Samulowitz, A., Gremyr, I., Eriksson, E., et al. (2018). "Brave men" and "emotional women": A theory-guided literature review on gender bias in health care and gendered norms towards patients with chronic pain. *Pain research and management*, *2018*(1), 6358624.
72. Schäfer, G., Prkachin, K., Kaseweter, K. et al. (2016). Health care providers' judgments in chronic pain: the influence of gender and trustworthiness. Pain, 157(8), 1618-1625.
73. Schenk, L., Krimmel, S., & Colloca, L. (2017). Observe to get pain relief: current evidence and potential mechanisms of socially learned pain modulation. Pain, 158(11), 2077-2081.
74. Schoenthaler, A., & Williams, N. (2022). Looking beneath the surface: racial bias in the treatment and management of pain. *JAMA Network Open*, *5*(6), e2216281-e2216281.
75. Scioli-Salter, E., Forman, D., Otis, J., et al. (2015). The shared neuroanatomy and neurobiology of comorbid chronic pain and PTSD: therapeutic implications. *The Clinical Journal of Pain*, *31*(4), 363-374.
76. Sharp, T. J., & Harvey, A. G. (2001). Chronic pain and posttraumatic stress disorder: mutual maintenance? *Clinical psychology review*, *21*(6), 857-877.
77. Shavers, V., Bakos, A., & Sheppard, V. (2010). Race, ethnicity, and pain among the US adult population. Journal of health care for the poor and underserved, 21(1), 177-220.
78. Staton, L., Panda, M., Chen, I., et al. (2007). When race matters: disagreement in pain perception between patients and their physicians in primary care. *Journal of the National Medical Association*, *99*(5), 532.
79. Stone, A., Bruehl, S., Smith, C., et al. (2018). Social learning pathways in the relation between parental chronic pain and daily pain severity and functional impairment in adolescents with functional abdominal pain. Pain, 159(2), 298-305.
80. Tasca, C., Rapetti, M., Carta, M. G., et al. (2012). Women and hysteria in the history of mental health. *Clinical practice and epidemiology in mental health: CP & EMH*, *8*, 110.
81. Tidmarsh, L., Harrison, R., Ravindran, D., et al. (2022). The influence of adverse childhood experiences in pain management: mechanisms, processes, and trauma-informed care. Frontiers in Pain Research, 3, 923866.
82. Tobb, K., Kocher, M., & Bullock-Palmer, R. (2022). Underrepresentation of women in cardiovascular trials-it is time to shatter this glass ceiling. *American Heart Journal Plus: Cardiology Research and Practice*, *13*, 100109.
83. Van der Kolk, B. (2014). *The body keeps the score: Brain, mind, and body in the healing of trauma*. Viking.
84. Walsh, K., Boring, B., Nanavaty, N., et al. (2022). Lifetime ostracism experiences and mechanisms of pain. Frontiers in Pain Research, 3, 1037472.
85. Weisse, C. S., Sorum, P. C., Sanders, K. N., et al. (2001). Do gender and race affect decisions about pain management? *Journal of general internal medicine*, *16*, 211-217.
86. You, D. S., Albu, S., Lisenbardt, H., et al. (2019). Cumulative childhood adversity as a risk factor for common chronic pain conditions in young adults. *Pain Medicine*, *20*(3), 486-494.
87. Young, D., Chao, L., Neylan, T., et al. (2018). Association among anterior cingulate cortex volume, psychophysiological response, and PTSD diagnosis in a Veteran sample. *Neurobiology of Learning and Memory*, *155*, 189-196.
88. Zajacova, A., Grol-Prokopczyk, H., & Zimmer, Z. (2021). Pain trends among American adults, 2002–2018: patterns, disparities, and correlates. Demography, 58(2), 711-738.
89. Zhang, L., Losin, E. A. R., Ashar, Y. et al. (2021). Gender biases in estimation of others' pain. The journal of pain, 22(9), 1048-1059.

90. Zhai, Z, Yip, S., Lacadie, C. et al. (2019). Childhood trauma moderates inhibitory control and anterior cingulate cortex activation during stress. *Neuroimage*, *185*, 111-118.

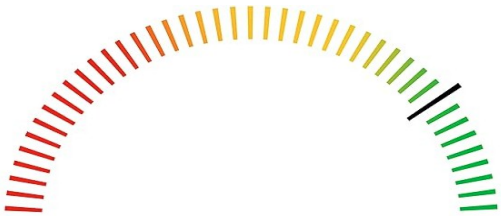
CHAPTER 9.

1. Albring, A., Wendt, L., Benson, S., et al. (2012). Placebo effects on the immune response in humans: the role of learning and expectation. *PloS one*, *7*(11), e49477.
2. Amanzio, M., Cipriani, G., & Mitsikostas, D. (2022). The nocebo phenomenon in the COVID-19 pandemic: a nocebodemic effect. *Expert Review of Clinical Pharmacology*, *15*(12), 1377-1382.
3. Belcher, A., Cole, T., Massey, E., et al. (2023). Effectiveness of conditioned open-label placebo with methadone in treatment of opioid use disorder: a randomized clinical trial. JAMA Network Open, 6(4), e237099-e237099.
4. Benedetti, F. (2006). Placebo analgesia. Neurological Sciences, 27, s100-s102.
5. Benedetti, F., & Amanzio, M. (2011). The placebo response: how words and rituals change the patient's brain. Patient education and counseling, 84(3), 413-419.
6. Benedetti, F., Amanzio, M., Vighetti, S., et al. (2006). The biochemical and neuroendocrine bases of the hyperalgesic nocebo effect. *Journal of Neuroscience*, *26*(46), 12014-12022.
7. Benedetti, F., Carlino, E., & Pollo, A. (2011). How placebos change the patient's brain. *Neuropsychopharmacology*, *36*(1), 339-354.
8. Benedetti, F., Colloca, L., Torre, E., et al. (2004). Placebo-responsive Parkinson patients show decreased activity in single neurons of subthalamic nucleus. Nature neuroscience, 7(6), 587-588.
9. Benedetti, F., Frisaldi, E., Carlino, E., et al. (2016). Teaching neurons to respond to placebos. The Journal of physiology, 594(19), 5647-5660.
10. Benedetti, F., Lanotte, M., Lopiano, L., et al. (2007). When words are painful: unraveling the mechanisms of the nocebo effect. Neuroscience, 147(2), 260-271.
11. Benedetti, F., Pollo, A., Lopiano, L., et al. (2003). Conscious expectation and unconscious conditioning in analgesic, motor, and hormonal placebo/nocebo responses. Journal of Neuroscience, 23(10), 4315-4323.
12. Benedetti, F., Shaibani, A., Arduino, C., et al. (2023). Open-label nondeceptive placebo analgesia is blocked by the opioid antagonist naloxone. *Pain*, *164*(5), 984-990.
13. Bernstein, M., Fuchs, N., Rosenfield, M., et al. (2021). Treating pain with open-label placebos: A qualitative study with post-surgical pain patients. The Journal of Pain, 22(11), 1518-1529.
14. Bienenfeld, L., Frishman, W., & Glasser, S. (1996). The placebo effect in cardiovascular disease. American Heart Journal, 132(6), 1207-1221.
15. Cannon, W. B. (1942). " Voodoo" death. *American anthropologist*, *44*(2), 169-181.
16. Carvalho C, Caetano JM, Cunha L, et al. (2016). Open-label placebo treatment in chronic low back pain: a randomized controlled trial. Pain, 157(12), 2766.
17. Colloca, L., & Benedetti, F. (2006). How prior experience shapes placebo analgesia. Pain, 124(1-2), 126-133.
18. Colloca, L., Klinger, R., Flor, H., et al. (2013). Placebo analgesia: psychological and neurobiological mechanisms. Pain, 154(4), 511-514.
19. Czerniak, E., Oberlander, T., Weimer, K., et al. (2020). “Placebo by Proxy” and “Nocebo by Proxy” in children: a review of parents' role in treatment outcomes. *Frontiers in Psychiatry*, *11*, 169.
20. De la Fuente-Fernández, R., Ruth, T. J., Sossi, V., et al. (2001). Expectation and dopamine release: mechanism of the placebo effect in Parkinson's disease. Science, 293(5532), 1164-1166.
21. Eippert, F., Bingel, U., Schoell, E. et al. (2009). Activation of the opioidergic descending pain control system underlies placebo analgesia. Neuron, 63(4), 533-543.

22. Espay, A. J., Norris, M. M., Eliassen, J. C., et al. (2015). Placebo effect of medication cost in Parkinson disease: a randomized double-blind study. *Neurology*, *84*(8), 794-802.
23. Fang, F., Fall, K., Mittleman, M., et al. (2012). Suicide and cardiovascular death after a cancer diagnosis. New England Journal of Medicine, 366(14), 1310-1318.
24. Linskens, F., van der Scheer, E., Stortenbeker, I., et al. (2023). Negative language use of the physiotherapist in low back pain education impacts anxiety and illness beliefs: A randomised controlled trial in healthy respondents. *Patient Education and Counseling*, *110*, 107649.
25. Ghanizada, H., Iljazi, A., Ashina, H., et al. (2021). Nocebo response in human models of migraine: A systematic review and meta-analysis of randomized, double-blind, placebo-controlled, two-way crossover trials in migraine without aura and healthy volunteers. Cephalalgia, 41(1), 99-111.
26. Hallegraeff, J., Kan, R., van Trijffel, E., et al. (2020). State anxiety improves prediction of pain and pain-related disability after 12 weeks in patients with acute low back pain: a cohort study. Journal of physiotherapy, 66(1), 39-44.
27. Harris, I., Sidhu, V., Mittal, R., et al. (2020). Surgery for chronic musculoskeletal pain: the question of evidence. Pain, 161, S95-S103.
28. Häuser, W., Hansen, E., & Enck, P. (2012). Nocebo phenomena in medicine: their relevance in everyday clinical practice. Deutsches Ärzteblatt International, 109(26), 459.
29. Hoenemeyer, T. W., Kaptchuk, T. J., Mehta, T. S., et al. (2018). Open-label placebo treatment for cancer-related fatigue: a randomized-controlled clinical trial. *Scientific Reports*, *8*(1), 2784.
30. Jensen K, Kaptchuk T, Kirsch I. et al. (2012). Nonconscious activation of placebo and nocebo pain responses. Proceedings of the National Academy of Sciences, 109(39), 15959-15964.
31. Jonas, WB, Crawford, C., Colloca, L., et al (2015). To what extent are surgery and invasive procedures effective beyond a placebo response? A systematic review with meta-analysis of randomised, sham controlled trials. BMJ open, 5(12), e009655.
32. Kam-Hansen, S., Jakubowski, M., Kelley, J. M., et al. (2014). Altered placebo and drug labeling changes the outcome of episodic migraine attacks. *Science Translational Medicine*, *6*(218), 218ra5-218ra5.
33. Kaptchuk, T., Friedlander, E., Kelley, J. et al (2010). Placebos without deception: a randomized controlled trial in irritable bowel syndrome. PloS One, 5(12), e15591.
34. Kelley, J., Kaptchuk, T., Cusin, C., et al. (2012). Open-label placebo for major depressive disorder: A pilot randomized controlled trial. Psychotherapy and Psychosomatics, 81(5), 312–314.
35. Keltner, J., Furst, A., Fan, C., et al. (2006). Isolating the modulatory effect of expectation on pain transmission: a functional magnetic resonance imaging study. Journal of Neuroscience, 26(16), 4437-4443.
36. Kirsch, I. (2019). Placebo effect in the treatment of depression and anxiety. *Frontiers in Psychiatry*, *10*, 464277.
37. Ko, J. H., Feigin, A., Mattis, P. J., et al. (2014). Network modulation following sham surgery in Parkinson's disease. The Journal of Clinical Investigation, 124(8), 3656-3666.
38. Lembo, A., Kelley, J., Nee, J., et al. (2021). Open-label placebo vs double-blind placebo for irritable bowel syndrome: a randomized clinical trial. Pain, 162(9), 2428-2435.
39. Levine, J., Gordon, N., Smith, R. et al. (1981). Analgesic responses to morphine and placebo in individuals with postoperative pain. Pain, 10(3), 379-389.
40. Lidstone, S. (2014). Great expectations: the placebo effect in Parkinson's disease. Placebo, 139-147.
41. Lidstone, S. C., Schulzer, M., Dinelle, K., et al. (2010). Effects of expectation on placebo-induced dopamine release in Parkinson disease. Archives of General Psychiatry, 67(8), 857-865.
42. Louw, A., Diener, I., Fernández-de-Las-Peñas, C., et al. (2017). Sham surgery in orthopedics: a systematic review of the literature. Pain Medicine, 18(4), 736-750.

43. MacKrill, K., Gamble, G. D., & Petrie, K. J. (2020). The effect of television and print news stories on the nocebo responding following a generic medication switch. *Clinical Psychology in Europe*, *2*(2), e2623.
44. Miller, F. G., Colloca, L., & Kaptchuk, T. J. (2009). The placebo effect: illness and interpersonal healing. *Perspectives in Biology and Medicine*, *52*(4), 518-539.
45. Morales-Quezada, L., Mesia-Toledo, I., Estudillo-Guerra, A., et al. (2020). Conditioning open-label placebo: a pilot pharmacobehavioral approach for opioid dose reduction and pain control. Pain Reports, 5(4), e828.
46. Moseley, J., O'Malley, K., Petersen, N., et al. (2002). A controlled trial of arthroscopic surgery for osteoarthritis of the knee. *New England Journal of Medicine*, *347*(2), 81-88.
47. Price, D. D., Finniss, D. G., & Benedetti, F. (2008). A comprehensive review of the placebo effect: recent advances and current thought. *Annu. Rev. Psychol.*, *59*(1), 565-590.
48. Reeves, R., Ladner, M., Hart, R. et al. (2007). Nocebo effects with antidepressant clinical drug trial placebos. General Hospital Psychiatry, 29(3), 275-277.
49. Rossettini, G., Camerone, E. M., Carlino, E., et al. (2020). Context matters: the psychoneurobiological determinants of placebo, nocebo and context-related effects in physiotherapy. *Archives of Physiotherapy*, *10*, 1-12.
50. Rossettini, G., Campaci, F., Bialosky, J., et al. (2023). The biology of placebo and nocebo effects on experimental and chronic pain: state of the art. *Journal of Clinical Medicine*, *12*(12), 4113.
51. Schedlowski, M., Enck, P., Rief, W., et al. (2015). Neuro-bio-behavioral mechanisms of placebo and nocebo responses: implications for clinical trials and clinical practice. Pharmacological Reviews, 67(3), 697-730.
52. Schienle, A., Höfler, C., Übel, S., et al. (2018). Emotion-specific nocebo effects: an fMRI study. *Brain Imaging and Behavior*, *12*, 180-187.
53. Schmid, J., Bingel, U., Ritter, C., et al. (2015). Neural underpinnings of nocebo hyperalgesia in visceral pain: a fMRI study in healthy volunteers. *Neuroimage*, *120*, 114-122.
54. Schmid, J., Theysohn, N., Gaß, F., et al. (2013). Neural mechanisms mediating positive and negative treatment expectations in visceral pain: a functional magnetic resonance imaging study on placebo and nocebo effects in healthy volunteers. *PAIN*, *154*(11), 2372-2380.
55. Silva, C., Moura-Neto, J. A., Dos Reis, M. A., et al. (2021). Renal manifestations of Fabry disease: a narrative review. *Canadian journal of kidney health and disease*, *8*, 2054358120985627.
56. Srikameswaran, A. (2021). Placebo-inspired project wins $12 million grant to help Parkinson's patients. PittWire, University of Pittsburgh. Oct 26, 2021.
57. Sternberg, E. M. (2002). Walter B. Cannon and "'Voodoo Death": A perspective from 60 years on. *American Journal of Public Health*, *92*(10), 1564-1566.
58. Stumpfe, K. D. (1979). The psychogenic death of Mr. J. A case report. *Zeitschrift fur Psychosomatische Medizin und Psychoanalyse*, *25*(3), 263-273.
59. Thomaidou, M., Peerdeman, K., Koppeschaar, M. et al. (2021). How negative experience influences the brain: a comprehensive review of the neurobiological underpinnings of nocebo hyperalgesia. Frontiers in Neuroscience, 15, 652552.
60. Varelmann, D., Pancaro, C., Cappiello, E. C., et al. (2010). Nocebo-induced hyperalgesia during local anesthetic injection. Anesthesia & Analgesia, 110(3), 868-870.
61. Wager, T., Scott, D., & Zubieta, J. (2007). Placebo effects on human μ-opioid activity during pain. Proceedings of the National Academy of Sciences, 104(26), 11056-11061.
62. Wartolowska, K. (2019). The nocebo effect as a source of bias in the assessment of treatment effects. *F1000Research*, *8*, 5.
63. Wartolowska, K., Judge, A., Hopewell, S., et al. (2014). Use of placebo controls in the evaluation of surgery: systematic review. *BMJ*, *348*.

64. Wells, R., & Kaptchuk, T. (2012). To tell the truth, the whole truth, may do patients harm: the problem of the nocebo effect for informed consent. *The American Journal of Bioethics*, *12*(3), 22-29.
65. Wood, F., Howard, J., Finegold, J. et al. (2020). N-of-1 trial of a statin, placebo, or no treatment to assess side effects. New England Journal of Medicine, 383(22), 2182-2184.



Tell Me Where It Hurts

by Rachel Zoffness PhD

Complete Reference List
Part 3

Some of the activities in Part 3 were adapted from Zoffness, R. (2020). The Pain Management Workbook: Powerful CBT and Mindfulness Skills to Take Control of Pain and Reclaim Your Life. New Harbinger Publications.

CHAPTER 10

1. Bujak, B., Regan, E., Beattie, P., et al. (2019). The effectiveness of interdisciplinary intensive outpatient programs in a population with diverse chronic pain conditions: A systematic review and meta-analysis. Pain Management, 9(4), 417-429.
2. Butler, S. & Loeser, J. (2023). Multidisciplinary Pain Management: A Tale of Two Outcomes. Anesthesiology, 138(3), 312-315.
3. Cheatle, M. D. (2016). Biopsychosocial approach to assessing and managing patients with chronic pain. *Medical Clinics*, *100*(1), 43-53.
4. Dowell D, Ragan K, Jones C, et al (2022). CDC Clinical Practice Guideline for Prescribing Opioids for Pain — United States. MMWR Recomm Rep, 71(No. RR-3), 1–9
5. Elbers, S., Wittink, H., Konings, S., et al. (2022). Longitudinal outcome evaluations of Interdisciplinary Multimodal Pain Treatment programmes for patients with chronic primary musculoskeletal pain: A systematic review and meta-analysis. *European Journal of Pain*, *26*(2), 310-335
6. Gatchel, R., McGeary, D., McGeary, C., et al. (2014). Interdisciplinary chronic pain management: past, present, and future. *American psychologist*, *69*(2), 119.
7. Gatchel, R. J. & Okifuji, A. (2006). Evidence-based scientific data documenting the treatment and cost-effectiveness of comprehensive pain programs for chronic nonmalignant pain. *The Journal of Pain*, *7*(11), 779-793.

8. Mercer Lindsay, N., Chen, C., Gilam, G., et al. (2021). Brain circuits for pain and its treatment. Science translational medicine, 13(619), eabj7360.
9. Moseley, G. & Flor, H. (2012). Targeting cortical representations in the treatment of chronic pain: a review. Neurorehabilitation and Neural Repair, 26(6), 646-652.
10. Murphy J, McKellar J, Raffa S, et al (2014). Cognitive behavioral therapy for chronic pain among veterans: Therapist manual. Washington, D.C.: Department of Veterans Affairs
11. Nahin, R. (2022). Use of multimodal multidisciplinary pain management in the U.S. JAMA Network Open, 5(11), e2240620-e2240620.
12. Oslund, S., Robinson, R., Clark, T., et al. (2009). Long-term effectiveness of a comprehensive pain management program: strengthening the case for interdisciplinary care. *Baylor University Medical Center Proceedings*, 22(3), 211-214.
13. Pilitsis, J. G., Khazen, O., & Wenzel, N. (2021). Multidisciplinary firms and the treatment of chronic pain: a case study of low back pain. Frontiers in Pain Research, 2, 781433.
14. Randall, E., Smith, K., Conroy, C., et al. (2018). Back to living: long-term functional status of pediatric patients who completed intensive interdisciplinary pain treatment. *The Clinical Journal of Pain*, *34*(10), 890-899.
15. Stanos, S. (2012). Focused review of interdisciplinary pain rehabilitation programs for chronic pain management. *Current Pain and Headache Reports*, *16*, 147-152.
16. U.S. Department of Health and Human Services (2019). Pain Management Best Practices Inter-Agency Task Force Report: Updates, Gaps, Inconsistencies, and Recommendations. Retrieved from: https://www.hhs.gov/ash/advisory-committees/pain/reports/index.html

CHAPTER 11

1. Bergouignan, A., Legget, K., De Jong, N., et al. (2016). Effect of frequent interruptions of prolonged sitting on self-perceived levels of energy, mood, food cravings and cognitive function. International Journal of Behavioral Nutrition and Physical Activity, 13, 1-12.
2. Blumberg, M., Lesku, J., Libourel, P. et al. (2020). What is REM sleep?. Current biology, 30(1), R38-R49.
3. Bobinski F, Ferreira T, Córdova M, et al (2015). Role of brainstem serotonin in analgesia produced by low-intensity exercise on neuropathic pain after sciatic nerve injury in mice. Pain 156, 2595–2606.
4. Brain, K., Burrows, T., Bruggink, L., et al (2021). Diet and chronic non-cancer pain: The state of the art and future directions. *Journal of clinical medicine*, *10*(21), 5203.
5. Brasure, M., Fuchs, E., MacDonald, R., et al. (2016). Psychological and behavioral interventions for managing insomnia disorder: an evidence report for a clinical practice guideline by the American College of Physicians. *Annals of internal medicine*, *165*(2), 113-124.
6. Buffey, A. J., Herring, M. P., Langley, C. K., et al. (2022). The acute effects of interrupting prolonged sitting time in adults with standing and light-intensity walking on biomarkers of cardiometabolic health in adults: a systematic review and meta-analysis. *Sports Medicine*, *52*(8), 1765-1787.
7. Cashin, A., Wand, B., O'Connell, N., et al. (2023). Pharmacological treatments for low back pain in adults: an overview of Cochrane Reviews. *Cochrane Database of Systematic Reviews*, 4
8. Chekroud, S. R., Gueorguieva, R., Zheutlin, A, et al. (2018). Association between physical exercise and mental health in 1· 2 million individuals in the USA between 2011 and 2015: a cross-sectional study. The lancet psychiatry, 5(9), 739-746.

9. Chen, S., Liu, M., Cook, J., et al. (2009). Sedentary lifestyle as a risk factor for low back pain: a systematic review. *International archives of occupational and environmental health*, *82*, 797-806.
10. Chou, R., Turner, J., Devine, et al. (2015). The effectiveness and risks of long-term opioid therapy for chronic pain: a systematic review for a National Institutes of Health Pathways to Prevention Workshop. Annals of internal medicine, 162(4), 276-286.
11. Davidson, J., Dickson, C., & Han, H. (2019). Cognitive behavioural treatment for insomnia in primary care: a systematic review of sleep outcomes. *British Journal of General Practice*, *69*(686), e657-e664.
12. Dowell D, Haegerich TM & Chou R (2016). CDC guideline for prescribing opioids for chronic pain—United States, 2016. J Am Med Assoc 315, 1624–1645.
13. Dragan, S., Șerban, M. C., Damian, G., et al. (2020). Dietary patterns and interventions to alleviate chronic pain. *Nutrients*, *12*(9), 2510.
14. Dunn, K. M., Saunders, K. W., Rutter, C. et al. (2010). Opioid prescriptions for chronic pain and overdose: a cohort study. Annals of internal medicine, 152(2), 85-92.
15. Duran, A., Friel, C., Serafini, M., et al. (2023). Breaking up prolonged sitting to improve cardiometabolic risk: dose–response analysis of a randomized crossover trial. *Medicine & Science in Sports & Exercise*, *55*(5), 847-855.
16. Edwards, M. & Loprinzi, P. (2018). Experimental effects of brief, single bouts of walking and meditation on mood profile in young adults. *Health promotion perspectives*, *8*(3), 171.
17. Edwards, S., Martin, S, Rainey, T. et al. (2023). Influence of acute fasting on pain tolerance in healthy subjects: a randomised crossover study. *Frontiers in Pain Research*, *4*, 1153107.
18. Elma, Ö., Brain, K., & Dong, H. (2022). The importance of nutrition as a lifestyle factor in chronic pain management: a narrative review. *Journal of Clinical Medicine*, *11*(19), 5950.
19. Field, R., Pourkazemi, F., Turton, J., & Rooney, K. (2021). Dietary interventions are beneficial for patients with chronic pain: a systematic review with meta-analysis. Pain Medicine, 22(3), 694-714.
20. Finan, P. H., Buenaver, L. F., Coryell, V. T., et al. (2014). Cognitive-behavioral therapy for comorbid insomnia and chronic pain. *Sleep medicine clinics*, *9*(2), 261.
21. Gan, T. (2017). Poorly controlled postoperative pain: prevalence, consequences, and prevention. *Journal of Pain Research*, 2287-2298.
22. Gillette, M. U., & Tischkau, S. A. (1999). Suprachiasmatic nucleus: the brain's circadian clock. *Recent progress in hormone research*, *54*, 33-58.
23. Haack, M., Simpson, N., Sethna, N., et al. (2020). Sleep deficiency and chronic pain: potential underlying mechanisms and clinical implications. *Neuropsychopharmacology*, *45*(1), 205-216.
24. Holden, M. A., Hattle, M., Runhaar, J., et al. (2023). Moderators of the effect of therapeutic exercise for knee and hip osteoarthritis: a systematic review and individual participant data meta-analysis. *The Lancet Rheumatology*, *5*(7), e386-e400.
25. Hylands-White, N., Duarte, R., & Raphael, J. (2017). An overview of treatment approaches for chronic pain management. Rheumatology international, 37, 29-42.
26. Jonas, W. B., Crawford, C., Colloca, L., et al. (2015). To what extent are surgery and invasive procedures effective beyond a placebo response? A systematic review with meta-analysis of randomised, sham controlled trials. BMJ open, 5(12), e009655.
27. Kho, M. E., Molloy, A. J., Clarke, F., et al. (2016). CYCLE pilot: a protocol for a pilot randomised study of early cycle ergometry versus routine physiotherapy in mechanically ventilated patients. *BMJ open*, *6*(4), e011659.
28. Lee, M., Silverman, S. M., Hansen, H., et al. (2011). A comprehensive review of opioid-induced hyperalgesia. Pain physician, 14(2), 145.

29. Lima, L. V., Abner, T. S., & Sluka, K. A. (2017). Does exercise increase or decrease pain? Central mechanisms underlying these two phenomena. *The Journal of physiology*, *595*(13), 4141-4150.
30. Luque-Suarez, A., Martinez-Calderon, J., & Falla, D. (2019). Role of kinesiophobia on pain, disability and quality of life in people suffering from chronic musculoskeletal pain: a systematic review. *British Journal Of Sports Medicine*, *53*(9), 554-559.
31. Mahdavi, S., Riahi, R., Vahdatpour, B., et al. (2021). Association between sedentary behavior and low back pain; A systematic review and meta-analysis. Health promotion perspectives, 11(4), 393.
32. Mayo Clinic. (2024). Chronic Pain: Medication Decisions. https://www.mayoclinic.org/chronic-pain-medication-decisions/art-20360371
33. Menon, V. (2023). 20 years of the default mode network: A review and synthesis. Neuron, 111(16), 2469-2487.
34. Mercer Lindsay, N., Chen, C., Gilam, G., et al. (2021). Brain circuits for pain and its treatment. Science translational medicine, 13(619), eabj7360.
35. Merkle, S. L., Sluka, K. A., & Frey-Law, L. A. (2020). The interaction between pain and movement. *Journal of Hand Therapy*, *33*(1), 60-66.
36. Mitchell, M. D., Gehrman, P., Perlis, M., et al. (2012). Comparative effectiveness of cognitive behavioral therapy for insomnia: a systematic review. *BMC family practice*, *13*, 1-11.
37. Muench, A., Vargas, I., Grandner, M. A., et al. (2022). We know CBT-I works, now what?. Faculty reviews, 11.
38. Nijs, J., Mairesse, O., Neu, D., et al. (2018). Sleep disturbances in chronic pain: neurobiology, assessment, and treatment in physical therapist practice. *Physical therapy*, *98*(5), 325-335.
39. O'Grady, H. K., Hasan, H., Rochwerg, B., et al. (2024). Leg cycle ergometry in critically ill patients—an updated systematic review and meta-analysis. NEJM evidence, 3(12), EVIDoa2400194.
40. Offit, P. (2013). The vitamin myth: Why we think we need supplements. The Atlantic, 19.
41. Park, S. H., & Weber, F. (2020). Neural and homeostatic regulation of REM sleep. *Frontiers in psychology*, *11*, 1662.
42. Rabbitts, J., Fisher, E., Rosenbloom, B. et al. (2017). Prevalence and predictors of chronic postsurgical pain in children: a systematic review and meta-analysis. The journal of pain, 18(6), 605-614.
43. Raffa, R. B., & Pergolizzi Jr, J. V. (2013). Opioid-induced hyperalgesia: is it clinically relevant for the treatment of pain patients?. *Pain Management Nursing*, *14*(3), e67-e83.
44. Rahman, S., Kidwai, A., Rakhamimova, E., et al. (2023). Clinical diagnosis and treatment of chronic pain. *Diagnostics*, *13*(24), 3689.
45. Reiter, R. J., Mayo, J. C., Tan, D. X., et al. (2016). Melatonin as an antioxidant: under promises but over delivers. *Journal of pineal research*, *61*(3), 253-278.
46. Rice, D., Nijs, J., Kosek, E., et al. (2019). Exercise-induced hypoalgesia in pain-free and chronic pain populations: state of the art and future directions. The Journal of Pain, 20(11), 1249-1266.
47. Rice, J., White, A., Scarpati, L. et al. (2017). Long-term systemic corticosteroid exposure: a systematic literature review. Clinical therapeutics, 39(11), 2216-2229.
48. Rivat, C., & Ballantyne, J. (2016). The dark side of opioids in pain management: basic science explains clinical observation. *Pain reports*, *1*(2), e570.
49. Rivkees, S. A. (2007). The development of circadian rhythms: from animals to humans. *Sleep medicine clinics*, *2*(3), 331-341.
50. Robblee, M., Kim, C., Abate, et al (2016). Saturated fatty acids engage an IRE1α-dependent pathway to activate the NLRP3 inflammasome in myeloid cells. Cell reports, 14(11), 2611-2623.

51. Rossman, J. (2019). Cognitive-behavioral therapy for insomnia: an effective and underutilized treatment for insomnia. *American journal of lifestyle medicine*, *13*(6), 544-547.
52. Sawalha, K., Tripathi, V., Alkhatib, D., et al. (2023). Our hidden enemy: Ultra-processed foods, inflammation, and the battle for heart health. *Cureus*, *15*(10).
53. Sellem, L., Srour, B., Javaux, G., et al. (2024). Food additive emulsifiers and cancer risk: Results from the French prospective NutriNet-Santé cohort. Plos Medicine, 21(2), e1004338.
54. Selvanathan, J., Pham, C., Nagappa, M., et al. (2021). Cognitive behavioral therapy for insomnia in patients with chronic pain–a systematic review and meta-analysis of randomized controlled trials. *Sleep medicine reviews*, *60*, 101460.
55. Seres, D. (2023). What Supplements Do You Need? Probably None. Columbia University, Irving Medical Center.
56. Serwe, K. M., Swartz, A. M., Hart, T. L., et al. (2011). Effectiveness of long and short bout walking on increasing physical activity in women. *Journal of women's health*, *20*(2), 247-253.
57. Shinohara, A., Kagaya, H., Komura, H., et al. (2023). The effect of in-bed leg cycling exercises on muscle strength in patients with intensive care unit-acquired weakness: A single-center retrospective study. *Journal of Rehabilitation Medicine-Clinical Communications*, *6*, 18434.
58. Siebers, M., Biedermann, S. V., & Fuss, J. (2023). Do endocannabinoids cause the runner's high? Evidence and open questions. *The Neuroscientist*, *29*(3), 352-369.
59. Sluka, K. A., Frey-Law, L., & Bement, M. H. (2018). Exercise-induced pain and analgesia? Underlying mechanisms and clinical translation. *Pain*, *159*, S91-S97.
60. Sturgeon, J., Cooley, C., & Minhas, D. (2024). Practical approaches for clinicians in chronic pain management: Strategies and solutions. *Best Practice & Research Clinical Rheumatology*, *38*(1), 101934.
61. Suchecki, D., Tiba, P. A., & Machado, R. B. (2012). REM sleep rebound as an adaptive response to stressful situations. Frontiers in neurology, 3, 41.
62. Tang, N. K. (2021). Is cognitive-behaviour therapy for insomnia (CBT-I) the new best pain killer?. *Sleep medicine reviews*, *60*.
63. Tick, H. (2015). Nutrition and pain. *Physical Medicine and Rehabilitation Clinics*, *26*(2), 309-320.
64. Van Straten, A., van der Zweerde, T., Kleiboer, A., et al (2018). Cognitive and behavioral therapies in the treatment of insomnia: a meta-analysis. Sleep medicine reviews, 38, 3-16.
65. Young, D., Hivert, M., Alhassan, S., et al. (2016). Sedentary behavior and cardiovascular morbidity and mortality: a science advisory from the American Heart Association. Circulation, 134(13), e262-e279.
66. Zoffness, R. (2020). *The Pain Management Workbook.* New Harbinger.

CHAPTER 12

1. Alfredsson, L., Armstrong, B., Butterfield, D., et al. (2020). Insufficient sun exposure has become a real public health problem. *International Journal of Environmental Research and Public Health*, *17*(14), 5014.
2. Andrasik, F., Grazzi, L., Usai, S., et al. (2007). Pharmacological treatment compared to behavioural treatment for juvenile tension-type headache: results at two-year follow-up. Neurological Sciences, 28, S235-S238.
3. Ashar, Y., Gordon, A., Schubiner, H., et al. (2022). Effect of pain reprocessing therapy vs placebo and usual care for patients with chronic back pain: a randomized clinical trial. JAMA psychiatry, 79(1), 13-23.
4. Bao, S., Qiao, M., Lu, Y., et al. (2022). Neuroimaging mechanism of cognitive behavioral therapy in pain management. *Pain Research and Management*, 1, 6266619.

5. Bove, G., Naylor, M., & Bushnell, M. (2018). Complementary and integrative approaches for pain management.
6. Broderick, J., Keefe, F., Schneider, S., et al. (2016). Cognitive behavioral therapy for chronic pain is effective, but for whom?. Pain, 157(9), 2115-2123.
7. Campbell, P. D., Miller, A. M., & Woesner, M. E. (2017). Bright light therapy: seasonal affective disorder and beyond. *The Einstein journal of biology and medicine: EJBM*, *32*, E13.
8. Cherkin, D. C., Sherman, K. J., Balderson, B. et al. (2016). Effect of mindfulness-based stress reduction vs cognitive behavioral therapy or usual care on back pain and functional limitations in adults with chronic low back pain: a randomized clinical trial. JAMA, 315(12), 1240-1249.
9. Cordier, L., & Diers, M. (2018). Learning and unlearning of pain. Biomedicines, 6(2), 67.
10. Corrado, P., Gottlieb, H., & Abdelhamid, M. (2003). The effect of biofeedback and relaxation training on anxiety and somatic complaints in chronic pain patients. American Journal of Pain Management, 13(4), 133-139.
11. Crockett, R. (2024, March 4). How Belly Breathing Benefits Your Body, Mind. Mayo Clinic.
12. Cross, M., Acevedo, A., Leger, K. et al (2023). How and why could smiling influence physical health? A conceptual review. Health Psychology Review, 17(2), 321-343.
13. Cunningham, N., Kashikar-Zuck, S., & Coghill, R. (2019). Brain mechanisms impacted by psychological therapies for pain: identifying targets for optimization of treatment effects. *Pain reports*, *4*(4), e767.
14. D'raven, L., Moliver, N., & Thompson, D. (2015). Happiness intervention decreases pain and depression, boosts happiness among primary care patients. Primary health care research & development, 16(2), 114-126.
15. Darnall, B. D., Burns, J. W., Hong, J., et al. (2024). Empowered Relief, cognitive behavioral therapy, and health education for people with chronic pain: a comparison of outcomes at 6-month Follow-up for a randomized controlled trial. *Pain Reports*, *9*(1), e1116.
16. DeRubeis, R. J., Siegle, G. J., & Hollon, S. D. (2008). Cognitive therapy versus medication for depression: treatment outcomes and neural mechanisms. *Nature Reviews Neuroscience*, *9*(10), 788-796.
17. Dubinsky, M., Bleakman, A. P., Panaccione, R., et al. (2023). Bowel urgency in ulcerative colitis: current perspectives and future directions. *Official journal of the American College of Gastroenterology| ACG*, *118*(11), 1940-1953.
18. Ehde, D., Dillworth, T., & Turner, J. (2014). Cognitive-behavioral therapy for individuals with chronic pain: efficacy, innovations, and directions for research. American psychologist, 69(2), 153.
19. Frank, D. L., Khorshid, L., Kiffer, J. F., et al. (2010). Biofeedback in medicine: who, when, why and how?. *Mental health in family medicine*, *7*(2), 85.
20. Garland E, Brintz C., Hanley A. et al. J. (2020). Mind-body therapies for opioid-treated pain: a systematic review and meta-analysis. JAMA Internal Medicine, 180(1), 91-105.
21. Garland, E. L., Froeliger, B., Zeidan, F., et al. (2013). The downward spiral of chronic pain, prescription opioid misuse, and addiction: cognitive, affective, and neuropsychopharmacologic pathways. *Neuroscience & Biobehavioral Reviews*, *37*(10), 2597-2607.
22. Glombiewski, J., Sawyer, A., Gutermann, J. et al. (2010). Psychological treatments for fibromyalgia: a meta-analysis. PAIN, 151(2), 280-295.
23. Goldenberg, J. Z., Brignall, M., Hamilton, M., et al. (2019). Biofeedback for treatment of irritable bowel syndrome. *Cochrane Database of Systematic Reviews*, (11).
24. Goldin, P. R., & Gross, J. J. (2010). Effects of mindfulness-based stress reduction (MBSR) on emotion regulation in social anxiety disorder. *Emotion*, *10*(1), 83.

25. Gratzer, D., & Khalid-Khan, F. (2016). Internet-delivered cognitive behavioural therapy in the treatment of psychiatric illness. *Cmaj*, *188*(4), 263-272.
26. Greenwald, J., & Shafritz, K. (2018). An integrative neuroscience framework for the treatment of chronic pain: from cellular alterations to behavior. Frontiers in Integrative Neuroscience, 12, 18.
27. Hedman-Lagerlöf, M., Gasslander, N., Hoffmann, A. et al. (2022). Effect of exposure-based vs traditional cognitive behavior therapy for fibromyalgia: a two-site single-blind randomized controlled trial. Pain, 10-1097.
28. Hoel, D. G., Berwick, M., de Gruijl, F. R., et al. (2016). The risks and benefits of sun exposure 2016. *Dermato-endocrinology*, *8*(1), e1248325.
29. Hoffman, B., Papas, R., Chatkoff, D., et al. (2007). Meta-analysis of psychological interventions for chronic low back pain. Health psychology, 26(1), 1.
30. Hollon, S. D., DeRubeis, R. J., Andrews, P. et al. (2021). Cognitive therapy in the treatment and prevention of depression: A fifty-year retrospective with an evolutionary coda. Cognitive Therapy and Research, 45(3), 402-417.
31. Jinich-Diamant, A., Garland, E., Baumgartner, J., et al. (2020). Neurophysiological mechanisms supporting mindfulness meditation–based pain relief: An updated review. Current pain and headache reports, 24, 1-10.
32. Joseph, A. E., Moman, R. N., Barman, R. A., et al. (2022). Effects of slow deep breathing on acute clinical pain in adults: a systematic review and meta-analysis of randomized controlled trials. *Journal of Evidence-Based Integrative Medicine*, *27*, 2515690X221078006.
33. Kabat-Zinn, J., Lipworth, L., & Burney, R. (1985). The clinical use of mindfulness meditation for the self-regulation of chronic pain. *Journal of behavioral medicine*, *8*, 163-190.
34. Kaczkurkin, A. N., & Foa, E. B. (2015). Cognitive-behavioral therapy for anxiety disorders: an update on the empirical evidence. *Dialogues in clinical neuroscience*, *17*(3), 337-346.
35. Kashikar-Zuck, S., Sil, S., Lynch-Jordan, A. M., et al. (2013). Changes in pain coping, catastrophizing, and coping efficacy after cognitive-behavioral therapy in children and adolescents with juvenile fibromyalgia. The Journal of Pain, 14(5), 492-501.
36. Kent, P., Haines, T., O'Sullivan, P., et al. (2023). Cognitive functional therapy with or without movement sensor biofeedback versus usual care for chronic, disabling low back pain (RESTORE): a randomised, controlled, three-arm, parallel group, phase 3, clinical trial. The Lancet, 401(10391), 1866-1877.
37. Khan, M., Akhter, S., Soomro, R. et al. (2014). The effectiveness of Cognitive Behavioral Therapy (CBT) with general exercises versus general exercises alone in the management of chronic low back pain. Pak J Pharm Sci, 27(4 Suppl), 1113-1116.
38. Kimmey, B. A., McCall, N. M., Wooldridge, L. M., et al. (2022). Engaging endogenous opioid circuits in pain affective processes. *Journal of neuroscience research*, *100*(1), 66-98.
39. Knoerl, R., Lavoie Smith, E., & Weisberg, J. (2016). Chronic pain and cognitive behavioral therapy: an integrative review. Western Journal of Nursing Research, 38(5), 596-628.
40. Kondo, K., Noonan, K., Freeman, M., et al. (2019). Efficacy of biofeedback for medical conditions: an evidence map. *Journal of General Internal Medicine*, *34*, 2883-2893.
41. Kringelbach, M. L., & Berridge, K. C. (2010). The functional neuroanatomy of pleasure and happiness. Discovery medicine, 9(49), 579.
42. Leknes, S., & Tracey, I. (2008). A common neurobiology for pain and pleasure. Nature reviews neuroscience, 9(4), 314-320.
43. Lieberman, M. D., Eisenberger, N. I., Crockett, M. et al. (2007). Putting feelings into words. Psychological science, 18(5), 421-428.

44. Lin, T., Heckman, T., & Anderson, T. (2022). The efficacy of synchronous teletherapy versus in-person therapy: A meta-analysis of randomized clinical trials. Clinical Psychology: Science and Practice, 29(2), 167.
45. Majeed, M. & Sudak, D. (2017). Cognitive behavioral therapy for chronic pain—One therapeutic approach for the opioid epidemic. *Journal of Psychiatric Practice*, *23*(6), 409-414.
46. Manninen, S., Tuominen, L., Dunbar, R., et al. (2017). Social laughter triggers endogenous opioid release in humans. *Journal of Neuroscience*, *37*(25), 6125-6131.
47. Mariano, T. Y., Wan, L., Edwards, R., et al. (2021). Online teletherapy for chronic pain: a systematic review. Journal of telemedicine and telecare, 27(4), 195-208.
48. McCarberg, B., & Peppin, J. (2019). Pain pathways and nervous system plasticity: learning and memory in pain. Pain Medicine, 20(12), 2421-2437.
49. Moore, B. A., Fiellin, D. A., Cutter, C. J., et al. (2016). Cognitive behavioral therapy improves treatment outcomes for prescription opioid users in primary care buprenorphine treatment. *Journal of substance abuse treatment*, *71*, 54-57.
50. Morley, S., Eccleston, C., & Williams, A. (1999). Systematic review and meta-analysis of randomized controlled trials of cognitive behaviour therapy and behaviour therapy for chronic pain in adults, excluding headache. *Pain*, *80*(1-2), 1-13.
51. Mullally, W. J., Hall, K., & Goldstein, R. (2009). Efficacy of biofeedback in the treatment of migraine and tension type headaches. *Pain physician*, *12*(6), 1005.
52. Müller, R., Terrill, A. L., Jensen, M. P., et al. (2015). Happiness, pain intensity, pain interference, and distress in individuals with physical disabilities. American journal of physical medicine & rehabilitation, 94(12), 1041-1051.
53. O'Sullivan, P., Caneiro, J., O'Keeffe, M., et al. (2018). Cognitive functional therapy: an integrated behavioral approach for the targeted management of disabling low back pain. *Physical Therapy*, *98*(5), 408-423.
54. Pennebaker, J. W. (1997). Writing about emotional experiences as a therapeutic process. Psychological science, 8(3), 162-166.
55. Powell, A. (2018). When science meets mindfulness. The Harvard Gazette.
56. Powers, S. W., Kashikar-Zuck, S. M., Allen, J. R., et al. (2013). Cognitive behavioral therapy plus amitriptyline for chronic migraine in children and adolescents: a randomized clinical trial. *JAMA*, *310*(24), 2622-2630.
57. Reid, M. C. (2016). Expanding Targets for Intervention in Later Life Pain: What Role Can Patient Beliefs, Expectations and Pleasant Activities Play?. *Clinics in geriatric medicine*, *32*(4), 797.
58. Safren, S., Otto, M., Sprich, S., et al. (2005). Cognitive-behavioral therapy for ADHD in medication-treated adults with continued symptoms. Behaviour research and therapy, 43(7), 831-842.
59. Shi, J., Liu, Z., Zhou, X., et al. (2023). Effects of breathing exercises on low back pain in clinical: A systematic review and meta-analysis. Complementary Therapies in Medicine, 79, 102993.
60. Sirucek, L., Price, R., Gandhi, W., et al. (2021). Endogenous opioids contribute to the feeling of pain relief in humans. Pain, 162(12), 2821-2831.
61. Syrjala, K., Jensen, M. P., Mendoza, M. E., et al. (2014). Psychological and behavioral approaches to cancer pain management. Journal of Clinical Oncology, 32(16), 1703-1711.
62. Tick, H., Nielsen, A., Pelletier, K., et al. (2018). Evidence-based nonpharmacologic strategies for comprehensive pain care: the consortium pain task force white paper. Explore, 14(3), 177-211.
63. Toledo, T., Vore, C., Huber, F., et al. (2024). The effect of emotion regulation on the emotional modulation of pain and nociceptive flexion reflex. *Pain*, *165*(6), 1266-1277.

64. van Veelen, S., Vuong, C., Gerritsma, J. et al. (2023). Efficacy of non-pharmacological interventions to reduce pain in children with sickle cell disease: a systematic review. Pediatric blood & cancer, 70(6), e30315.
65. Veehof, M., Trompetter, H., Bohlmeijer, E., et al. (2016). Acceptance-and mindfulness-based interventions for the treatment of chronic pain: a meta-analytic review. *Cognitive behaviour therapy*, *45*(1), 5-31.
66. Waldman, S. D. (2011). Pain management. Elsevier Health Sciences.
67. Wang, J., Wei, Z., Yao, N., et al. (2023). Association between sunlight exposure and mental health: Evidence from a special population without sunlight in work. *Risk management and healthcare policy*, 1049-1057.
68. Zeidan, F., Adler-Neal, A., Wells, R., et al. (2016). Mindfulness-meditation-based pain relief is not mediated by endogenous opioids. Journal of Neuroscience, 36(11), 3391-3397.
69. Zeidan, F., Martucci, K., Kraft, R., et al. (2011). Brain mechanisms supporting the modulation of pain by mindfulness meditation. *Journal of Neuroscience*, *31*(14), 5540-5548.
70. Zeidan, F., & Vago, D. R. (2016). Mindfulness meditation–based pain relief: a mechanistic account. *Annals of the New York Academy of Sciences*, *1373*(1), 114-127.
71. Zoffness, R. (2020). *The Pain Management Workbook.* New Harbinger.

CHAPTER 13

1. Aghakhani, N., Faraji, N., Alinejad, V., et al. (2022). The effect of guided imagery on the quality and severity of pain and pain-related anxiety associated with dressing changes in burn patients: a randomized controlled trial. Burns, 48(6), 1331-1339.
2. Basten-Günther, J., Peters, M., & Lautenbacher, S. (2019). Optimism and the experience of pain: a systematic review. *Behavioral Medicine*, *45*(4), 323-339.
3. Bedell, S., Graboys, T., Bedell, E., et al. (2004). Words that harm, words that heal. *Archives of Internal Medicine*, *164*(13), 1365-1368.
4. Beehler, G., Murphy, J., King, P., et al. (2019). Brief cognitive behavioral therapy for chronic pain: results from a clinical demonstration project in primary care behavioral health. The Clinical journal of pain, 35(10), 809-817.
5. Caron-Trahan, R., Jusseaux, A. E., Aubin, M., et al. (2024). Practicing self-hypnosis to reduce chronic pain: a qualitative exploratory study of HYlaDO. *British Journal of Pain*, *18*(1), 28-41.
6. De Paolis, G., Naccarato, A., Cibelli, F., et al. (2019). The effectiveness of progressive muscle relaxation and interactive guided imagery as a pain-reducing intervention in advanced cancer patients: A multicentre randomised controlled non-pharmacological trial. *Complementary therapies in clinical practice*, *34*, 280-287.
7. Derbyshire, S., Whalley, M., Stenger, V., et al. (2004). Cerebral activation during hypnotically induced and imagined pain. Neuroimage, 23(1), 392-401.
8. Dunne, S., Sheffield, D., & Chilcot, J. (2018). Brief report: Self-compassion, physical health and the mediating role of health-promoting behaviours. *Journal of health psychology*, *23*(7), 993-999.
9. Edwards, K. A., Pielech, M., Hickman, et al. (2019). The relation of self-compassion to functioning among adults with chronic pain. European Journal of Pain, 23(8), 1538-1547.
10. Elkins, G., Jensen, M., & Patterson, D. (2007). Hypnotherapy for the management of chronic pain. *Intl. Journal of Clinical and Experimental Hypnosis*, *55*(3), 275-287.
11. Forte, A. J., Guliyeva, G., McLeod, H., et al. (2022). The impact of optimism on cancer-related and postsurgical cancer pain: a systematic review. Journal of pain and symptom management, 63(2), e203-e211.

12. Fusco, N., Bernard, F., Roelants, F., et al. (2020). Hypnosis and communication reduce pain and anxiety in peripheral intravenous cannulation: Effect of Language and Confusion on Pain During Peripheral Intravenous Catheterization (KTHYPE), a multicentre randomised trial. British journal of anaesthesia, 124(3), 292-298.
13. Garland, E. L., Froeliger, B., Zeidan, F., et al. (2013). The downward spiral of chronic pain, prescription opioid misuse, and addiction: cognitive, affective, and neuropsychopharmacologic pathways. *Neuroscience & Biobehavioral Reviews*, *37*(10), 2597-2607.
14. Giacobbi Jr, P. R., Stabler, M. E., Stewart, J., et al. (2015). Guided imagery for arthritis and other rheumatic diseases: a systematic review of randomized controlled trials. *Pain Management Nursing*, *16*(5), 792-803.
15. Goodin, B. R., & Bulls, H. W. (2013). Optimism and the experience of pain: benefits of seeing the glass as half full. *Current pain and headache reports*, *17*, 1-9.
16. Groninger, H., Violanti, D., & Mete, M. (2024). Virtual reality for pain management in hospitalized patients with cancer: A randomized controlled trial. Cancer, 130(14), 2552-2560.
17. Guillory, J. E., Hancock, J. T., Woodruff, C., et al. (2015). Text messaging reduces analgesic requirements during surgery. Pain Medicine, 16(4), 667-672.
18. Hall, A., Aubrey-Bassler, K., Thorne, B., et al. (2021). Do not routinely offer imaging for uncomplicated low back pain. *BMJ*, *372*.
19. Hanssen, M., Peters, M., Vlaeyen, J., et al. (2013). Optimism lowers pain: evidence of the causal status and underlying mechanisms. Pain, 154(1), 53-58.
20. Hill, P. L., Allemand, M., & Roberts, B. W. (2013). Examining the pathways between gratitude and self-rated physical health across adulthood. *Personality and individual differences*, *54*(1), 92-96.
21. Howe, L. C., Goyer, J. P., & Crum, A. J. (2017). Harnessing the placebo effect: Exploring the influence of physician characteristics on placebo response. *Health Psychology*, *36*(11), 1074.
22. Kaplun, A., Alperovitch-Najenson, D., & Kalichman, L. (2021). Effect of guided imagery on pain and health-related quality of life in musculoskeletal medicine: a comprehensive narrative review. Current pain and headache reports, 25(12), 76.
23. Kent, P., Haines, T., O'Sullivan, P., et al. (2023). Cognitive functional therapy with or without movement sensor biofeedback versus usual care for chronic, disabling low back pain (RESTORE): a randomised, controlled, three-arm, parallel group, phase 3, clinical trial. The Lancet, 401(10391), 1866-1877.
24. Kılıç, A., Hudson, J., McCracken, L. M., et al. (2021). A systematic review of the effectiveness of self-compassion-related interventions for individuals with chronic physical health conditions. *Behavior therapy*, *52*(3), 607-625.
25. Lanzaro, C., Carvalho, S., Lapa, T., et al. (2021). A systematic review of self-compassion in chronic pain: from correlation to efficacy. The Spanish Journal of Psychology, 24, e26.
26. Lee, J. S., & Pyun, Y. D. (2012). Use of hypnosis in the treatment of pain. *The Korean journal of pain*, *25*(2), 75-80.
27. Licciardone, J. C., Tran, Y., Ngo, K., et al. (2024). Physician Empathy and Chronic Pain Outcomes. JAMA Network Open, 7(4), e246026-e246026.
28. Matheve, T., Bogaerts, K., & Timmermans, A. (2020). Virtual reality distraction induces hypoalgesia in patients with chronic low back pain: a randomized controlled trial. Journal of neuroengineering and rehabilitation, 17, 1-12.
29. May, A. (2007). Neuroimaging: visualising the brain in pain. Neurological Sciences, 28, S101-S107.
30. Mercer Lindsay, N., Chen, C., Gilam, G., et al. (2021). Brain circuits for pain and its treatment. Science translational medicine, 13(619), eabj7360.

31. Miller, K., Rodger, S., Bucolo, S., et al. (2010). Multi-modal distraction. Using technology to combat pain in young children with burn injuries. Burns, 36(5), 647-658.
32. Moffett, J. K., Green, A., & Jackson, D. (2013). Words that help, Words that harm. Topical Issues in Pain 5, 5, 105.
33. Moseley, G. (2004). Imagined movements cause pain and swelling in a patient with complex regional pain syndrome. Neurology, 62(9), 1644-1644.
34. Moseley, G. L., & Flor, H. (2012). Targeting cortical representations in the treatment of chronic pain: a review. *Neurorehabilitation and neural repair*, *26*(6), 646-652.
35. Moseley, G., Zalucki, N., Birklein, F., et al. (2008). Thinking about movement hurts: the effect of motor imagery on pain and swelling in people with chronic arm pain. Arthritis Care & Research: Official Journal of the American College of Rheumatology, 59(5), 623-631.
36. Murphy, J., Cordova, M., & Dedert, E. (2022). Cognitive behavioral therapy for chronic pain in veterans: Evidence for clinical effectiveness in a model program. Psychological services, 19(1), 95.
37. Nascimento, S., Oliveira, L., & DeSantana, J. (2018). Correlations between brain changes and pain management after cognitive and meditative therapies: a systematic review of neuroimaging studies. Complementary Therapies in Medicine, 39, 137-145.
38. Obeagu, E. I., & Obeagu, G. U. (2024). Managing emotional and physical stress in sickle cell anemia: a review of effective strategies and approaches. *Annals of Medicine and Surgery*, 10-1097.
39. Ogino, Y., Nemoto, H., Inui, K., et al. (2007). Inner experience of pain: imagination of pain while viewing images showing painful events forms subjective pain representation in human brain. Cerebral cortex, 17(5), 1139-1146.
40. Oh, J., Purol, M., Weidmann, R., et al. (2022). Health and well-being consequences of optimism across 25 years in the Rochester adult longitudinal study. Journal of Research in Personality, 99, 104237.
41. Parizad, N., Goli, R., Faraji, N., et al. (2021). Effect of guided imagery on anxiety, muscle pain, and vital signs in patients with COVID-19: A randomized controlled trial. *Complementary therapies in clinical practice*, *43*, 101335.
42. Pergolizzi Jr, J., Coluzzi, F., Colucci, R., et al. (2020). Statins and muscle pain. *Expert Review of Clinical Pharmacology*, *13*(3), 299-310.
43. Purdie, F., & Morley, S. (2016). Compassion and chronic pain. Pain, 157(12), 2625-2627.
44. Rozanski, A., Bavishi, C., Kubzansky, L. et al. (2019). Association of optimism with cardiovascular events and all-cause mortality: a systematic review and meta-analysis. JAMA network open, 2(9), e1912200.
45. Schlesinger, I., Benyakov, O., Erikh, I., et al. (2009). Parkinson's disease tremor is diminished with relaxation guided imagery. *Movement disorders: official journal of the Movement Disorder Society*, *24*(14), 2059-2062.
46. Schütze, R., Rees, C., Smith, A., et al. (2018). How can we best reduce pain catastrophizing in adults with chronic noncancer pain? A systematic review and meta-analysis. *The journal of Pain*, *19*(3), 233-256.
47. Silvestrini N. & Corradi-Dell'Acqua C. (2023). Distraction and cognitive control independently impact parietal and prefrontal response to pain. Social Cognitive and Affective Neuroscience, 18(1), nsad018.
48. Singer, T., Seymour, B., O'doherty, J., et al. (2004). Empathy for pain involves the affective but not sensory components of pain. Science, 303(5661), 1157-1162.

49. Smeets, R., Vlaeyen, J., Kester, A., et al. (2006). Reduction of pain catastrophizing mediates the outcome of both physical and cognitive-behavioral treatment in chronic low back pain. The journal of pain, 7(4), 261-271.
50. Soleymani, A., Arani, A. M., Raeissadat, S. A., et al. (2020). Rumination-focused cognitive-behavioral therapy for chronic low back pain: a randomized controlled trial. *Galen medical journal*, *9*, e1722.
51. Stellar, J. E., John-Henderson, N., Anderson, C. L., et al. (2015). Positive affect and markers of inflammation: discrete positive emotions predict lower levels of inflammatory cytokines. *Emotion*, *15*(2), 129.
52. Stewart, M. & Loftus, S. (2018). Sticks and stones: the impact of language in musculoskeletal rehabilitation. *Journal of Orthopaedic & Sports Physical Therapy*, *48*(7), 519-522.
53. Subnis, U., Starkweather, A., & Menzies, V. (2016). A current review of distraction-based interventions for chronic pain management. European Journal of Integrative Medicine, 8(5), 715-722.
54. Trakhtenberg, E. (2008). The effects of guided imagery on the immune system: A critical review. *International Journal of Neuroscience*, *118*(6), 839-855.
55. Thi, T., Mudiyanselage, S., & Huang, M. (2022). Effects of distraction on reducing pain during invasive procedures in children with cancer: a systematic review and meta-analysis. *Pain Management Nursing*, *23*(3), 281-292.
56. Webster, B., Bauer, A., Choi, Y., et al. (2013). Iatrogenic consequences of early magnetic resonance imaging in acute, work-related, disabling low back pain. *Spine*, *38*(22), 1939-1946.
57. Williams, N. H. (2009). Words that harm: words that heal. International Musculoskeletal Medicine, 31(3), 99-100.
58. Wren, A., Somers, T., Wright, M., et al (2012). Self-compassion in patients with persistent musculoskeletal pain: relationship of self-compassion to adjustment to persistent pain. Journal of pain and symptom management, 43(4), 759-770.
59. Zoffness, R. (2020). *The Pain Management Workbook.* New Harbinger.

CHAPTER 14

1. APA Clinical Practice Guideline for the Treatment of Post-Traumatic Stress Disorder. (2025). American Psychological Association.
2. Ashton-James, C., Anderson, S., Mackey, S., et al. (2022). Beyond pain, distress, and disability: the importance of social outcomes in pain management research and practice. *Pain*, *163*(3), e426-e431.
3. Barlow, D. H. (Ed.). (2021). Clinical handbook of psychological disorders: A step-by-step treatment manual. Guilford publications.
4. Bonsaksen, T., Ruffolo, M., Price, D., et al. (2023). Associations between social media use and loneliness in a cross-national population: do motives for social media use matter?. *Health psychology and behavioral medicine*, *11*(1), 2158089.
5. Bosco, M., Gallinati, J., & Clark, M. (2013). Conceptualizing and treating comorbid chronic pain and PTSD. Pain research and treatment, 2013(1), 174728.
6. Boyd, J., Lanius, R., & McKinnon, M. (2018). Mindfulness-based treatments for posttraumatic stress disorder: a review of the treatment literature and neurobiological evidence. *Journal of Psychiatry and Neuroscience*, *43*(1), 7-25.
7. Brom, D., Stokar, Y., Lawi, C., et al. (2017). Somatic experiencing for posttraumatic stress disorder: A randomized controlled outcome study. *Journal of Traumatic Stress*, *30*(3), 304-312.

8. Carey, B., Dell, C., Stempien, J., et al. (2022). Outcomes of a controlled trial with visiting therapy dog teams on pain in adults in an emergency department. PLoS One, 17(3), e0262599.
9. Celik, N., & Khorshid, L. (2015). The use of ShotBlocker for reducing the pain and anxiety associated with intramuscular injection: a randomized, placebo controlled study. *Holistic nursing practice*, *29*(5), 261-271.
10. Why Giving is Good for Your Health. (2022). Cleveland Clinic. From https://health.clevelandclinic.org/why-giving-is-good-for-your-health
11. Coan, J., Schaefer, H., & Davidson, R. (2006). Lending a hand: Social regulation of the neural response to threat. Psychological science, 17(12), 1032-1039.
12. Cusack, K., Jonas, D. E., Forneris, C. A., et al. (2016). Psychological treatments for adults with posttraumatic stress disorder: A systematic review and meta-analysis. *Clinical psychology review*, *43*, 128-141.
13. Dunbar, R. (2010). The social role of touch in humans and primates: behavioural function and neurobiological mechanisms. Neuroscience & Biobehavioral Reviews, 34(2), 260-268.
14. Dunbar, R. (2022). Virtual touch and the human social world. Current Opinion in Behavioral Sciences, 43, 14-19.
15. Dusek, J., Griffin, K., Finch, M., et al. (2018). Cost savings from reducing pain through the delivery of integrative medicine program to hospitalized patients. *The Journal of Alternative and Complementary Medicine*, *24*(6), 557-563.
16. Eckstein, M., Mamaev, I., Ditzen, B., et al. (2020). Calming effects of touch in human, animal, and robotic interaction—scientific state-of-the-art and technical advances. *Frontiers in psychiatry*, *11*, 555058.
17. Ellingsen, D., Leknes, S., Løseth, G., et al. (2016). The neurobiology shaping affective touch: expectation, motivation, and meaning in the multisensory context. *Frontiers in psychology*, *6*, 1986.
18. Gainer, D., Alam, S., Alam, H., et al. (2020). A flash of hope: eye movement desensitization and reprocessing (EMDR) therapy. *Innovations in clinical neuroscience*, *17*(7-9), 12.
19. Gupta, R., Kaur, G., Kaur, J., et al. (2020). Evaluating the effectiveness of TENS for maternal satisfaction in laboring parturients–Comparison with epidural analgesia. *Journal of Anaesthesiology Clinical Pharmacology*, *36*(4), 500-505.
20. Hagborg, J. M., Kalin, T., & Gerdner, A. (2022). The Childhood Trauma Questionnaire—Short Form (CTQ-SF) used with adolescents–methodological report from clinical and community samples. *Journal of Child & Adolescent Trauma*, *15*(4), 1199-1213.
21. Harper, C., Dong, Y., Thornhill, T. et al. (2015). Can therapy dogs improve pain and satisfaction after total joint arthroplasty? A randomized controlled trial. *Clinical Orthopaedics and Related Research*, *473*, 372-379.
22. Havey, J., Vlasses, F. R., Vlasses, P. H., et al. (2014). The effect of animal-assisted therapy on pain medication use after joint replacement. Anthrozoös, 27(3), 361-369.
23. Hertzberg, M. A., Feldman, M. E., Beckham, J., et al. (2000). Lack of efficacy for fluoxetine in PTSD: a placebo-controlled trial in combat veterans. Annals of Clinical Psychiatry, 12, 101-105.
24. Holt-Lunstad, J., Smith, T., & Layton, J. (2010). Social relationships and mortality risk: a meta-analytic review. *PLoS medicine*, *7*(7), e1000316.
25. Janevic, M. R., Shute, V., Connell, C. M., et al. (2020). The role of pets in supporting cognitive-behavioral chronic pain self-management: Perspectives of older adults. *Journal of Applied Gerontology*, *39*(10), 1088-1096.

26. Johnson, M. (2007). Transcutaneous electrical nerve stimulation: mechanisms, clinical application and evidence. *Reviews in pain*, *1*(1), 7-11.
27. Kraus, J., Frick, A., Roman, R., et al. (2019). Soothing the emotional brain: modulation of neural activity to personal emotional stimulation by social touch. *Social cognitive and affective neuroscience*, *14*(11), 1179-1185.
28. Kuhfuß, M., Maldei, T., Hetmanek, A., et al. (2021). Somatic experiencing–effectiveness and key factors of a body-oriented trauma therapy: a scoping literature review. *European Journal of Psychotraumatology*, *12*(1), 1929023.
29. Lumley, M., Yamin, J., Pester, B., et al. (2022). Trauma matters: psychological interventions for comorbid psychosocial trauma and chronic pain. Pain, 163(4), 599-603.
30. Meehan, E., & Carter, B. (2021). Moving with pain: what principles from somatic practices can offer to people living with chronic pain. *Frontiers in Psychology*, *11*, 620381.
31. Moretti, A., Gimigliano, F., Paoletta, M., et al. (2021). Efficacy and effectiveness of physical agent modalities in complex regional pain syndrome type I: a scoping review. Applied Sciences, 11(4), 1857.
32. Norman, S., Wilkins, K., Tapert, S., et al. (2010). A pilot study of Seeking Safety therapy with OEF/OIF veterans. *Journal of Psychoactive Drugs*, *42*(1), 83-87.
33. Perry, B. & Winfrey, O. (2021). What happened to you?: conversations on trauma, resilience, and healing. New York, Flatiron Books.
34. Pilkington, G., Johnson, M., & Thompson, K. (2025). Social prescribing for adults with chronic pain in the UK: a rapid review. *British Journal of Pain*, 20494637241312064
35. Powers, M. B., Halpern, J. M., Ferenschak, M. P., et al. (2010). A meta-analytic review of prolonged exposure for posttraumatic stress disorder. *Clinical psychology review*, *30*(6), 635-641.
36. Reczek, R., Stacey, L., & Thomeer, M. (2023). Parent–adult child estrangement in the United States by gender, race/ethnicity, and sexuality. Journal of Marriage and Family, 85(2), 494-517.
37. Şahan, S. & Yildiz, A. (2022). The effect of shotblocker application on intramuscular injection pain in adults: a meta-analysis. *Clinical Nursing Research*, *31*(5), 820-825.
38. Salamon, M. (2023). Mind & Mood: What Is Somatic Therapy? Harvard Health.
39. Schnurr P., Hamblen J., Wolf J., et al. (2024). The Management of Posttraumatic Stress Disorder and Acute Stress Disorder: Synopsis of the 2023 US Department of Veterans Affairs and US Department of Defense Clinical Practice Guideline. Annals of Internal Medicine, 177(3), 363-374.
40. Shapiro, F. (2014). The role of eye movement desensitization and reprocessing (EMDR) therapy in medicine: addressing the psychological and physical symptoms stemming from adverse life experiences. *The Permanente Journal*, *18*(1), 71.
41. Sherman, A., Balthazar, M., Zhang, W., et al. (2023). Seeking safety intervention for comorbid post-traumatic stress and substance use disorder: A meta-analysis. *Brain and Behavior*, *13*(5), e2999.
42. Simoncini, E., Stiaccini, G., Morelli, E., et al. (2023). The Effectiveness of the Buzzy Device in Reducing Pain in Children Undergoing Venipuncture: A Single-Center Experience. Pediatric Emergency Care, 39(10), 760-765.
43. Smith, A., & Alheneidi, H. (2023). The internet and loneliness. AMA Journal of Ethics, 25(11), 833-838.
44. Sturgeon, J., & Zautra, A. (2016). Social pain and physical pain: shared paths to resilience. *Pain management*, *6*(1), 63-74.

45. Sullivan, G., & Neria, Y. (2009). Pharmacotherapy of PTSD: current status and controversies. *Psychiatric Annals*, *39*(6), 2-347.
46. Susam, V., Friedel, M., Basile, P., et al. (2018). Efficacy of the Buzzy System for pain relief during venipuncture in children: a randomized controlled trial. *Acta Bio Medica: Atenei Parmensis*, *89* (Suppl 6), 6-16.
47. Teoli, D., Dua, A., & An, J. (2024). Transcutaneous electrical nerve stimulation. In *StatPearls*. StatPearls Publishing.
48. Thomtén, J., Boersma, K., Flink, I., et al. (2016). Social anxiety, pain catastrophizing and return-to-work self-efficacy in chronic pain: a cross-sectional study. *Scandinavian journal of pain*, *11*(1), 98-103.
49. Tomaszewski, C., Belot, R. A., Essadek, A., et al. (2023). Impact of dance therapy on adults with psychological trauma: a systematic review. *European journal of psychotraumatology*, *14*(2), 2225152.
50. van der Kolk, B., West, J., Rhodes, A., et al. (2014). Yoga as an adjunctive treatment for posttraumatic stress disorder: A randomized controlled trial. *The Journal of clinical psychiatry*, *75*(6), 22573.
51. Van der Kolk, B. A. (1994). The body keeps the score: Memory and the evolving psychobiology of posttraumatic stress. Harvard review of psychiatry, 1(5), 253-265.
52. Vance C, Dailey D, Rakel B, et al. (2014). Using TENS for pain control: the state of the evidence. Pain Manag. 4(3):197-209.
53. Watkins, L., Sprang, K., & Rothbaum, B. (2018). Treating PTSD: A review of evidence-based psychotherapy interventions. Frontiers in behavioral neuroscience, 12, 258.
54. Williams, K. D. (2007). Ostracism: The kiss of social death. Social and Personality Psychology Compass, 1(1), 236-247.
55. Wu, P., Feng, R., & Zhang, J. (2024). The relationship between loneliness and problematic social media usage in Chinese university students: a longitudinal study. BMC psychology, 12(1), 13.
56. Wurm, M., Edlund, S., Tillfors, M., et al. (2016). Characteristics and consequences of the co-occurrence between social anxiety and pain-related fear in chronic pain patients receiving multimodal pain rehabilitation treatment. *Scandinavian Journal of Pain*, *12*(1), 45-52.
57. Zhang, Y., Yan, F., Li, S., et al. (2021). Effectiveness of animal-assisted therapy on pain in children: A systematic review and meta-analysis. International journal of nursing sciences, 8(1), 30-37.
58. Zoffness, R. (2020). *The Pain Management Workbook*. New Harbinger.