

February 1, 2020

Vita
Jacob Miguel Vigil

Personal

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Education

Ph.D.	Developmental Psychology University of Missouri-Columbia Advisor: David C. Geary	2007
M.A.	Psychology University of Missouri-Columbia	2004
B.S.	Psychology University of New Mexico	2001

Positions

8/2016 to present	Director, Medical Cannabis Research Fund, University of New Mexico
8/2010 to present	Associate Professor, Department of Psychology, University of New Mexico
4/2011 to present	Faculty Affiliate, Southwest Hispanic Research Institute, University of New Mexico
4/2012 to present	Research Affiliate, New Mexico Veterans Affairs Health Care System, Albuquerque, NM
10/2007 to 8/2010	Faculty Associate, Center for Applied Research in Child and Adolescent Development, University of North Florida
8/2007 to 7/2010	Assistant Professor, Department of Psychology, University of North Florida

Funded Grants

Cannabis Consumption and Social Psychological Functioning in Healthy Young Adults (\$10,000), University of New Mexico Research Allocation Committee, 07/01/19-01/01/2021.

Social Contextual Influences on Patient Pain and Medical Staff's Triage Decisions (\$2,450), Grice Foundation Award, University of New Mexico, 11/14/13-11/14/14.

Contextual Factors in Pain Perception in the Emergency Department (\$12,600), Clinical and Translational Science Center, University of New Mexico, 12/01/2012-11/30/2013, with Dr. Alcock.

Implicit Mimicry of Pain Behaviors, Social Inferences, and Decision-Making in Healthy and Overweight Adults (\$2,333), University of New Mexico Research Allocation Committee, 02/10/12-09/30/2013.

Engaging Students in Mental Health Research to Benefit Children and their Community (\$27,091), University of North Florida Foundation Board, 12/15/08-12/15/09, with Dr. Ybarra and Dr. Perez.

Honors

Invited Speaker, New Mexico Statewide Epidemiological and Outcomes Workgroup, 2017; Invited Speaker, National Cannabis Summit, 2017; Invited Speaker, Translating Neurodevelopmental Research into Clinical Application, Pain in Child Health Institute, 2012; Invited Discussant, Determinants of Psychiatric Disorders, Hanse-Wissenschaftskolleg, 2011; Gus T. Ridgel Graduate Fellowship, University of Missouri, 2002-2007; Dissertation Research Award, University of Missouri, 2006; Parent's Association Award, University of Missouri, 2005; Distinguished Master's Thesis Award, University of Missouri, 2005; National Science Foundation Graduate Research Fellowship Program – Honorable Mention, 2004; Master's Thesis Research Award, University of Missouri, 2004; National Institute of Mental Health Career Opportunities in Research Scholarship (NIMH), University of New Mexico, 1999-2001.

Professional Affiliations

Pain in Child Health Research Consortium; International Association for the Study of Pain; University of New Mexico Medical Cannabis Research Fund

Editorial Boards

World Journal of Anesthesiology

Research Interests

Broad: evolutionary medicine, social cognition, health disparities, affective response, evolutionary psychology, sex differences, entheogens, medical *Cannabis*

Specific: My basic research focuses on the epigenesis (interaction between biology and individual experiences) and plasticity (variation) in the expression of: pain perception, stress response, emotional expression, peer interactions, reproductive development, family relations, community influences, societal ideals, reproductive strategy, cultural differences, and moral systems. My applied research focuses on health disparities and patient treatment, and effects of medical cannabis consumption on patient health outcomes.

Publications

- Doremus, J. M., Stith, S. S., & Vigil, J. M. (2020). Off-label use of recreational cannabis: Acid reflux in Colorado. *Economics Bulletin*, *40*, 338-348.
- Doremus, J. M., Stith, S. S., & Vigil, J. M. (2019). Using recreational cannabis to treat insomnia: Evidence from over-the-counter sleep aid sales in Colorado. *Complementary Therapies in Medicine*, *47*, 102207.
- Li, X., Vigil, J. M., Stith, S. S., Brockelman, F., Keenan, K., & Hall, B. (2019). The effectiveness of self-directed medical cannabis treatment for pain. *Complementary Therapies in Medicine*, *46*, 123-130.
- Stith, S. S., Vigil, J. M., Adams, I., & Reeve, A. (in press). Insurers save while patients pay: The redistribution of medication costs following enrollment in a state-legal medical cannabis program. In *Chronic Pain: Prevalence, Management and Outcomes*. (pp. xx-xx). Hauppauge, New York: Nova Science Publishers Inc.
- Stith, S. S., Vigil, J. M., Brockelman, F., Keenan, K., & Hall, B. (2019). The association between cannabis product characteristics and symptom relief. *Scientific Reports*, *9*, 2712. <https://www.nature.com/articles/s41598-019-39462-1>
- Diviant, J. P., Vigil, J. M., Stith, S. S. (2018). The role of cannabis within an emerging perspective on schizophrenia. *Medicines*, *5*, 86.
- Stith, S. S., Vigil, J. M., Brockelman, F., Keenan, K., & Hall, B. (2018). Patient-reported symptom relief following medical cannabis consumption. *Frontiers in Pharmacology*, *9*, 916. <https://www.frontiersin.org/articles/10.3389/fphar.2018.00916/full>.
- Vigil, J. M., Stith, S. S., Diviant, J. P., Brockelman, F., Keenan, K., & Hall, B. (2018). Effectiveness of raw, natural medical *Cannabis* flower for treating insomnia under naturalistic conditions. *Medicines*, *5*(3), 75. <https://www.mdpi.com/2305-6320/5/3/75>.
- Vigil, J. M., Stith, S. S., Reeve, A. P. (2018). Accuracy of patient opioid use reporting at the time of medical cannabis license renewal. *Pain Research and Management*, *1*, 1-4.
- Vigil, J. M., Coulombe, P., Little, A. C., Strenth, C., & Delaney, H. D. (in press). Are shorter people closer to God? The associations between gender, body size, and spiritual beliefs. In M. Knight and B. McCoy (Eds.) *Understanding Social Cognition: Theory, Perspectives and Cultural Differences*. (pp. xx-xx). Hauppauge, New York: Nova Science Publishers Inc.

- Stith, S. S., Vigil, J. M., Adams, I. M., & Reeve, A. P. (2018). Effects of legal access to cannabis on scheduled II-V drug prescriptions. *Journal of the American Medical Directors Association, 19*, 59-64.e1.
- Vigil, J. M., Stith, S. S., Adams, I. M., & Reeve, A. P. (2017). Associations between medical cannabis and prescription opioid use in chronic pain patients: A preliminary cohort study. *PLoS ONE, 12*(11): e0187795.
- Vigil, J. M., Coulombe, P., Rowell, L. N., Strenth, C. R., Kruger, E. S., Alcock, J., ..., LaMendola, J. (2017). The confounding effects of assessor ethnicity on subjective pain reporting in women. *The Open Anesthesiology Journal, 11*, 1-11.
- Vigil, J. M., Coulombe, P., Alcock, J., Stith, S. S., Kruger, E., & Cichowski, S. (2017). How nurse gender influences patient priority assignments in U.S. emergency departments. *Pain, 158*(3): 377-382.
- Vigil, J. M. (2016). Same-sex relationships. In V. Weeks-Shackelford and T.K. Shackelford (Eds). *Encyclopedia of Evolutionary Psychological Science*. (pp. 1-3). Switzerland: Springer International Publishing.
- Stith, S. S., & Vigil, J. M. V. (2016). Federal barriers to *Cannabis* research. *Science, 352* (6290), 1182.
- Vigil, J. M., Coulombe, P., Alcock, J., Kruger, E., Stith, S. S., Strenth, C., Parshall, M., & Cichowski, S. B. (2016). Patient ethnicity affects triage assessments and prioritization in U.S. Department of Veterans Affairs Emergency Departments. *Medicine, 95*(14):e3191.
- Vigil, J. M., & Stith, S. S. (2016). Ethnic disparities in health care continue to exist in U.S. Veterans Affairs emergency departments. In M. Townsend (Ed.), *Veterans: Political, Social and Health Issues*. Hauppauge, NY: Nova Science.
- Coulombe, P., Vigil, J. M., & Hernandez, E. (2016). Individual differences in health outcomes: Accounting for two sources of variation through cross-classified multilevel models. In E. Roberson (Ed.), *Psychology of Individual Differences: New Research*. (pp. 27-46). Hauppauge, NY: Nova Science.
- Kruger, E., Vigil, J. M., & Stith, S. S. (2016). Task specificity and the impact on both the individual and group during the formation of groups. *Behavioral and Brain Sciences, 39*;e156.
- Vigil, J. M., & Kruger, E. (2016). Multi-level selection, social signaling, and the evolution of human suffering gestures: The example of pain behaviors. *Behavioral and Brain Sciences, 39*, e56.
- Stith, S. S., & Vigil, J. M. (2016). Does ultrasociality really exist? And is it the best predictor of human economic behaviors? *Behavioral and Brain Sciences, 39*, e114.
- Vigil, J. M., Alcock, J., Coulombe, P., & Strenth, C. (2015). Emergency severity index

scores differ by health provider's gender and patient's age. *The Open Anesthesiology Journal*, 9, 17-22.

- Kruger, E., & Vigil, J. (2015). Translating the expression of pain in the face of uncertainty: The importance of human pain experiments for applied and clinical science. *World Journal of Anesthesiology*, 4, 13-16.
- Vigil, J. M., Strenth, C. R., Mueller, A. A., DiDomenico, J., Guevara Beltran, D., Coulombe, P., & Smith, J. E. (2015). The curse of curves; Sex differences in the associations between body shape and pain expression. *Human Nature*. 26(2):235-54
- Vigil, J. M., Alcock, J., Coulombe, P., McPherson, L., Parshall, M., Murata, A., & Brislen, H. (2015). Ethnic disparities in emergency severity index scores among U.S. Veteran's Affairs emergency department patients. *PLoS ONE*. 10(5): e0126792.
- Vigil, J. M., DiDomenico, J., Strenth, C., Coulombe, P., Kruger, E., Mueller, A. A., Guevara Beltran, D., & Adams, I. (2015). Experimenter effects on pain reporting in women vary across the menstrual cycle. *International Journal of Endocrinology*. 2015: 520719, 1-8; doi:10.1155/2015/520719.
- Vigil, J. M., Coulombe, P., & Strenth, C. R. (2014). Sex differences in social cognition responses are associated with peer network structures and ethnic backgrounds. In S.R. Nasato (Ed.) *Advances in Social Cognition Research*. (pp. 1-26). Hauppauge, New York: Nova Science Publishers Inc.
- Vigil, J. M., Pendleton, P., Coulombe, P., Vowels, K., Alcock, J., & Smith, B. (2014). Pain patients and who they live with: A correlational study of co-residence patterns and pain interference. *Pain Research & Management*, 19, e109-114.
- Vigil, J. M., Strenth, C., Trujillo, T., & Gangestad, S. W. (2014). Fluctuating experimental pain sensitivities across the menstrual cycle are contingent on women's current romantic relationship status. *PLoS ONE*. DOI:10.1371/journal.pone.0091993
- Vigil, J. M., Torres, D., Wolff, A., Hughes, K. (2014). Exposure to virtual social stimuli modulates subjective pain reports. *Pain Research & Management*, 19, e103-e108.
- Vigil, J. M., Rowell, L. N., Alcock, J., & Maestes, R. (2014). Laboratory personnel gender and cold pressor apparatus affect subjective pain reports. *Pain Research & Management*, 19, e13-e18.
- Vigil J. M., & Strenth C. (2014). No pain, no social gains: A social-signaling perspective of human pain behaviors. *World J Anesthesiol*, 3(1), 18-30 Available from: URL: <http://www.wjgnet.com/2218-6182/abstract/v3/i1/18.htm>.
- Vigil, J. M., Rowell, L. N., & Lutz, C. (2014). Gender expression, sexual orientation, and pain sensitivity in women. *Pain Research & Management*, 19, 87-92.
- Vigil, J. M., & Alcock, J. (2014). Tough guys or cry babies? Disentangling the role of examiner gender on patient pain reports. *Pain Research & Management*, 19, e9-e12.

- Vigil, J. M., & Strenth, C. (2014). Facial expression judgments support a socio-relational model, rather than a negativity bias model of political psychology. *Behavioral and Brain Sciences*, *37*, 331-332.
- Vigil, J. M., Rowell, N., Chouteau, S., Chavez, A., Jaramillo, E., Neal, M., & Waid, D. (2013). Sex differences in how social networks and relationship quality influence experimental pain sensitivity. *PLOS ONE*. DOI: 10.1371/journal.pone.0078663
- Vigil, J. M., Swartz, T. J., & Rowell, L. N. (2013). Subtle variation in ambient room temperature influences the expression of social cognition. *Behavioral and Brain Sciences*, *36*, 502-503.
- Vigil, J. M., Brophy, S., Johnson, T., Pendleton, P., & Rowell, N. L. (2013). Childhood correlates of protracted life dissatisfaction: Not all adversity hurts the same. In A. Esposito and V. Bianchi (Eds.) *The Psychology of Happiness*. (pp. 111-123). Hauppauge, New York: Nova Science Publishers Inc.
- Vigil, J. M., Brophy, S., Garrett, E., McMurry, S. (2013). Protracted biases in facial emotion perception and psychological functioning in self-reported victims of early-life interpersonal trauma. In T. Van Leeuwen and M. Brouwer (Eds.) *Psychology of Trauma* (pp. 111-131). Hauppauge, New York: Nova Science Publishers Inc.
- Vigil, J. M., & Venner, K. L. (2012). Prejudicial behavior is more closely linked to homophilic peer preferences than it is to trait bigotry. *Behavioral and Brain Sciences*, *35*, 38-39.
- Vigil, J. M., Dukes, A., Coulombe, P. (2012). Biopsychosocial correlates of cortisol activity in children exposed to natural disasters. In A. Esposito and V. Bianchi (Eds.) *Cortisol: physiology, regulation and health implications* (pp. 73-90). Hauppauge, New York: Nova Science Publishers Inc.
- Vigil, J. M., Coulombe, P., & Dukes, A. (2012). Neuronal de-activation is equally important for understanding emotional processing. *Behavioral and Brain Sciences*, *35*, 169-170.
- Vigil, J. M., & Brophy, S. (2012). Trustworthiness processing and psychobiological responses to natural disaster-induced distress in adolescents. *Journal of Aggression, Maltreatment & Trauma*, *21*, 385-402.
- Vigil, J. M., & Coulombe, P. (2012). Intra-regional assortative sociality may be better explained by social network dynamics rather than pathogen risk avoidance. *Behavioral and Brain Sciences*, *35*, 96-97.
- Vigil, J. M., Coulombe, P., & Dukes, A. (2011). The epidemiology of sex differences in self-esteem: A test of two explanatory models. In S. De Wals & K. Meszaros (Eds.), *Handbook on psychology of self-esteem* (pp. 101-118). Hauppauge, New York: Nova Science Publishers Inc.
- Vigil, J. M., & Coulombe, P. (2011). Biological sex and audience affects pain intensity and observational coding of other people's pain behaviors. *Pain*, *152*, 2125-2130.

- Vigil, J. M. (2011). Current states of opinion and future directions on the epidemiology of sex differences in human pain. *Pain Research and Management*, *16*, 317-319.
- Vigil, J. M., & Coulombe, P. (2010). Embodied simulation and the search for meaning are not necessary for facial expression processing. *Behavioral and Brain Sciences*, *33*, 461-463.
- Vigil, J. M. (2010). Political leanings vary with facial expression processing and psychosocial functioning. *Group Processes & Intergroup Relations*, *13*, 547-558.
- Vigil, J. M., Geary, D. C., Granger, D. A., & Flinn, M. V. (2010). Sex differences in salivary cortisol, alpha-amylase, and psychological functioning following Hurricane Katrina. *Child Development*, *81*, 1228-1240.
- Vigil, J. M., Carle, A. C., Geary, D. C., Granger, D. A., Flinn, M. V., & Pendleton, P. (2009). Maternal correlates of children's stress functioning following a major natural disaster. *Journal of Child and Adolescent Trauma*, *2*, 287-296.
- Vigil, J. M. (2009). The socio-relational framework of expressive behaviors as an integrative psychological paradigm. *Behavioral and Brain Sciences*, *32*, 408-428.
- Vigil, J. M. (2009). A socio-relational framework of sex differences in the expression of emotion. *Behavioral and Brain Sciences*, *32*, 375-428.
- Vigil, J. M., & Geary, D. C. (2009). An exploratory analysis of family coping styles and psychobiological distress among adolescents affected by a large-scale disaster. *Journal of Child and Adolescent Trauma*, *2*, 81-89.
- Vigil, J. M. (2008). Negative health costs associated with regular use of community-based assistance programs for families exposed to natural disasters. In M. R. Blakely & S. M. Timmons (Eds.), *Lifestyle and health research* (pp. 135-146). Hauppauge, New York: Nova Science Publishers Inc.
- Vigil, J. M. (2008). Sex differences in affect behaviors, desired social responses, and accuracy at understanding the social desires of other people. *Evolutionary Psychology*, *6*, 506-522.
- Vigil, J. M. (2008). Facial expression processing varies with political affiliation. *Nature Precedings*, <http://hdl.handle.net/10101/npre.2008.2414.1>
- Vigil, J. M., & Geary, D. C. (2008). A preliminary investigation of family coping styles and psychological well-being among adolescent survivors of Hurricane Katrina. *Journal of Family Psychology*, *22*, 176-180.
- Vigil, J. M., & Geary, D. C. (2008). Developmental consequences of childhood sexual abuse. In M. J. Smith (Ed.), *Childhood sexual abuse: Issues and challenges* (pp. 43-66). Hauppauge, New York: Nova Science Publishers Inc.
- Vigil, J. M. (2008). Social processing of discrete emotions in humans. *Nature Precedings*,

<http://hdl.handle.net/10101/npre.2008.2725.1>

Vigil, J. M. (2007). Asymmetries in the social styles and friendship preferences of men and women. *Human Nature*, 18, 143-161.

Byrd-Craven, J., Geary, D. C., Vigil, J. M., & Hoard, M. K. (2007). One mate or two? Life history traits and reproductive variation in low-income women. *Acta Psychologica Sinica*, 39, 469-480.

Vigil, J. M., Geary, D. C. & Byrd-Craven, J. (2006). Tradeoffs in low income women's mate-preferences: Within-sex differences in reproductive strategy. *Human Nature*, 17, 319-336.

Vigil, J. M., & Geary, D. C. (2006). Parenting and community background and variation in women's life history development. *Journal of Family Psychology*, 20, 597-604.

Vigil, J. M., Geary, D. C., & Byrd-Craven, J. (2005). A life history assessment of early childhood sexual abuse in women. *Developmental Psychology*, 41, 553-561.

Geary, D. C., Vigil, J., & Byrd-Craven, J. (2004). The evolution of human mate choice. *The Journal of Sex Research*, 41, 27-42.

Geary, D. C., Byrd-Craven, J., Hoard, M. K., Vigil, J., & Numtee, C. (2003). The evolution and development of boys social behavior. *Developmental Review*, 23, 444-470.

Media, Community, and Society (selected examples)

Research featured in: *Scientific American* (2009, January, p. 31), Time.com (<http://www.time.com/time/health/article/0,8599,2004902,00.html>), AOL News (<http://www.aolnews.com/2010/10/31/study-republicans-happier-than-democrats/>), KRQE News (<http://krqe.com/2015/07/21/unm-study-curvey-women-more-prone-to-pain/>), Stltoday.com (http://www.stltoday.com/news/opinion/columns/kevin-horrigan/article_f2505cde-3f7c-559a-9bac-ad65564f4085.html), Worldpharmanews.com (<http://www.worldpharmanews.com/>). Miller-Mccune. (<http://www.miller-mccune.com/politics/a-new-take-on-political-ideology-24683/>). Stop The Drug War (https://stopthedrugwar.org/chronicle/2016/jun/27/chronicle_am_dems_adopt_marijuan), KOB (<http://www.kob.com/albuquerque-news/study-compares-medical-marijuana-prescription-pills-chronic-pain/4601204/>), Marijuana Times (<https://www.marijuanatimes.org/crowdfunding-medical-marijuana-research/>), KOB4 Eye on New Mexico (<http://www.kob.com/politics-news/eye-on-new-mexico-drug-overdose-rate/4417172/>). Live Science (<http://www.livescience.com/culture/katrina-children-psychological-response-sex-differences-anniversary-100828.html>), High Times. (<https://hightimes.com/medicinal/weed-reduces-prescription-drug-abuse/>), NMMMJ.com (<https://nmmmj.com/7223/new-mexico-marijuana-news/university-of-new-mexico-study-finds-benefits-from-medical-marijuana/>), The Science Explorer (<http://thescienceexplorer.com/brain-and-body/us-federal-government-thwarting-proper-marijuana-research-report-claims>), Detox Facilities Texas (<http://www.detoxfacilitiestexas.com/blog/drug-abuse/overregulation-affecting-research-marijuana-say-scientists>), Science Alert (<https://www.sciencealert.com/scientists-claim->

the-government-is-still-blocking-proper-cannabis-research), Health Aim (<https://www.healthaim.com/scientists-claim-us-government-blocks-meaningful-cannabis-research-denies-access-high-quality-weed/59767>), Real News 4 (<http://www.realnews24.com/study-legal-access-to-cannabis-reduces-use-of-prescription-painkillers/>), Spirit of Chang (<http://www.spiritofchange.org/alternative-health/Cannabis-Reduces-Prescription-Drug-Use/>), The Hans India (<http://www.thehansindia.com/posts/index/Health/2017-09-25/Study-suggests-Marijuana-prevents-people-from-doing-hard-drugs/328885>), I Read Culture (<http://ireadculture.com/study-suggests-legal-access-cannabis-may-help-reduce-painkillers-use/>), ABQ Journal (<https://www.abqjournal.com/982583/let-pot-help-to-reduce-opioid-abuse.html>), Cannabis-med. (https://www.cannabis-med.org/english/bulletin/ww_en_db_cannabis_artikel.php?id=501), Cannabis Connections (<http://www.cannabisconnections.tk/2017/09/study-finds-cannabis-is-not-gateway-and.html>), Cannabisnewsjournal.co (<http://www.cannabisnewsjournal.co/2018/02/pay-it-forward-in-supporting-unm.html>), Science Daily (<https://www.sciencedaily.com/releases/2016/06/160624154712.htm>), Herb.co (<https://herb.co/2017/09/27/medical-cannabis-hard-drug/>), Drugpolicy.org (<http://www.drugpolicy.org/news/2017/04/decision-pending-adding-opioid-use-disorder-medical-marijuana-new-mexico>), Radio interview for Santa Fe Public Radio (<http://ksfr.org/post/unm-study-says-cannabis-can-help-opioid-addicts>), Inverse (<https://www.inverse.com/article/17552-scientists-plead-for-more-weed-to-study-as-lay-people-get-high-on-legalized-bud>), Marijuana Stocks (<http://marijuanastocks.com/weed-reduces-prescription-drug-abuse/>), Radio interview News Talk 770 The Katie Baines Show (**), Konbini. (<https://www.konbini.com/en/lifestyle/cannabis-may-actually-stop-people-using-harder-more-dangerous-gateway-drugs/>), Endoca (<https://www.endoca.com/blog/top-stories/5-best-medical-cannabis-research-crowdfunding-campaigns/>), Civilized Life (<https://www.civilized.life/articles/new-mexico-gateway-drug-study/>), Janest (<https://janest.com/article/2017/09/12/study-shows-pharmaceutical-patients-replacing-meds-weed/>), Labible (<http://www.ladbible.com/news/news-cannabis-is-not-a-gateway-and-stops-harder-drug-use-study-finds-20170921>), Big Think (<http://bigthink.com/paul-ratner/marijuana-may-help-stop-the-opiate-abuse-epidemic-suggests-study>), Cannabis.net (<https://cannabis.net/blog/medical/dr.-oz-is-proven-right-as-study-shows-cannabis-gets-people-off-opioids>), Science Blog (<https://scienceblog.com/496194/study-finds-legal-cannabis-may-reduce-use-dangerous-prescription-drugs/>), Medical Xpress (<https://medicalxpress.com/news/2017-09-legal-cannabis-dangerous-prescription-drugs.html>), Newkerala (<http://www.newkerala.com/news/fullnews-274692.html>), Outlook India (<https://www.outlookindia.com/newscroll/study-suggests-marijuana-prevents-people-from-doing-hard-drugs/1153758>), The Fix (<https://www.thefix.com/can-marijuana-reduce-prescription-painkiller-use>), Radio interview for Talk 1260 KTRC The Richard Eeds Show (<https://santafe.com/ktrc/podcasts/dr.-jacob-vigil-unm-researcher>), The Stranger (<http://www.thestranger.com/features/2017/10/11/25476218/can-you-smoke-your-way-sober>), Altnet.org (<https://www.altnet.org/drugs/how-legal-cannabis-improving-public-health-obesity-opioids-alcohol>), Echo Connection (<https://echoconnection.org/chronic-pain-patients-use-medical-cannabinoids-reduce-prescription-drug-use-study-finds/>), Notey (<http://www.notey.com/blogs/painkillers>), The Hill. (<http://thehill.com/opinion/healthcare/356702-trumps-opioid-agency-fails-to-cite-marijuanas-benefits-despite-mounting>), Wakeup-World (<https://wakeup-world.com/2017/11/15/study-medical-cannabis-significantly-reduces-prescription-drug-use/>), Bel Marra Health (<https://www.belmarrahealth.com/researchers-suggest-cannabis>

may-viable-solution-current-opioid-crisis/), Forum-substitutionspraxis.de
 (<http://www.forum-substitutionspraxis.de/substanzen/cannabis/cannabis-als-medizin>),
 US News & World Report. (<https://www.usnews.com/news/best-states/new-mexico/articles/2017-11-27/unm-study-medical-marijuana-an-alternative-for-opioids>),
 Medical Xpress (<https://medicalxpress.com/news/2017-11-medical-cannabis-effective-opioid-addiction.html>),
 Weednews.co (<https://www.weednews.co/rep-tulsi-gabbard-hhs-should-use-medical-marijuana-to-curb-opioid-abuse/>), Ganjapreneur.com
 (<https://www.ganjapreneur.com/university-of-new-mexico-study-finds-mmj-program-enrollees-decrease-opioid-use/>), KKOAT (<http://www.koat.com/article/unm-study-medical-marijuana-an-alternative-for-opioids/13943229>), THC Total Healthcare
 (<http://www.thctotalhealthcare.com/category/addiction/>), Shift Frequency
 (<https://www.shifrfrequency.com/medical-cannabis-applications/>), The 420 Times.
 (<http://the420times.com/2017/11/new-mexico-marijuana-program-finds-a-positive-reduction-of-opioid-addiction/>), Rise Earth (<http://www.riseearth.com/2017/11/cannabis-can-end-use-of-prescription.html>), Mg Retailer (<https://mgretailer.com/study-finds-reduction-in-opioid-use-for-patients-with-medical-cannabis/>), Seattle Times
 (<https://www.seattletimes.com/nation-world/unm-study-medical-marijuana-an-alternative-for-opioids/>), Blog.norml.org (<http://blog.norml.org/2017/11/20/study-medical-cannabis-registrants-more-likely-to-cess-using-opioids-compared-to-non-participants/>), Genehtik (<http://www.genehtik.com/marihuana-medicinal/>), Phoenix is Risen (<http://www.phoenixisrisen.co.uk/?p=15397>), Heartbeats-olc.org (<http://heartbeats-olc.org/tag/anxiety/>), KOB (<http://www.kob.com/health-news/unm-study-medical-marijuana-opioid-alternative/4683329/>), Miami Herald.
 (<http://www.miamiherald.com/news/article186650813.html>), Wowscience.io
 (<https://wowscience.io/article/5308/Legal+Cannabis+on+Fighting+the+Opioid+Crisis>),
 Leafly. (<https://www.leafly.com/news/health/unm-study-medical-marijuana-an-alternative-for-opioids>),
 The Olympian (<http://www.theolympian.com/news/politics-government/national-politics/article186650813.html>), Washington Times.
 (<https://www.washingtontimes.com/news/2017/nov/27/unm-study-medical-marijuana-an-alternative-for-opi/>),
 Mj Biz Daily. (<https://mjbizdaily.com/marijuana-alternative-opioids-pain-patients-college-study-shows/>),
 News Observer (<http://www.newsobserver.com/news/article186650813.html>), Before Its News
 (<http://beforeitsnews.com/alternative/2017/11/cannabis-can-end-the-use-of-prescription-pain-killers-3575437.html>),
 Patch (<https://patch.com/new-mexico/across-nm/medical-marijuana-could-reduce-opioid-use-new-mexico-scientists>), Mg Retailer
 (<https://mgretailer.com/study-finds-reduction-in-opioid-use-for-patients-with-medical-cannabis/>),
 Canna Maps (<https://news.cannamaps.com/2017/11/27/unm-study-medical-marijuana-an-alternative-for-opioids-2/>),
 The National Marijuana News (<https://thenationalmarijuananeews.com/mj-news/marijuana-prevents-people-from-doing-hard-drugs-like-cocaine-and-ecstasy/>),
 Argus-press.com (http://www.argus-press.com/news/state_news/article_a6f4abde-2799-5113-96ad-9bed733564c4.html),
 ABQ Journal (<https://www.abqjournal.com/1098577/unm-study-cannabis-aids-in-reducing-opioid-use.html>),
 Thecannabist.co (<http://www.thecannabist.co/2017/11/27/opioid-medical-marijuana-study-new-mexico/93330/>),
 CCenter dispatch.com (http://www.ccenterdispatch.com/news/state/article_8d248301-91e9-56f6-8422-82c56adf7d48.html),
 Dub News (<http://www.dubnews.com/more.php?title=UNM+study%3A+Cannabis+aids+in+reducing+opioid+use&u=aHR0cHM6Ly93d3cuYWJxam91cm5hbC5jb20vMTA5ODU3Ny91bm0tc3RlZHZkY2FubmFiaXMtYWlkei1pbi1yZWZlY2luZy1vcGlvaWQtdXNlLmh0bW>

w=&pubdate=Tue%2C+28+Nov+2017+02%3A43%3A00+GMT&category=Opioid), Weedtronic.com (<http://weedtronic.com/marijuana-an-alternative-to-opioids-for-pain-patients-college-study-shows-2/>), Dagga Magazine (<http://daggamagazine.com/2017/11/27/medical-marijuana-reduced-opioid-use-in-new-mexico-study/>), TheNewStribune.com (<http://www.thenewstribune.com/news/politics-government/national-politics/article186650813.html>), Reason.com (<http://reason.com/blog/2017/11/28/new-mexico-study-suggests-medical-cannab>), Apnews.com (<https://www.apnews.com/4c1a8256ebc54916bbddf400bf45685>), Weedistry.com (<https://weedistry.com/2017/11/28/unm-study-cannabis-aids-in-reducing-opioid-use/>), Gazette.com. (<http://gazette.com/news/marijuana>), Ledger-enquirer.com (<http://www.ledger-enquirer.com/news/article186650813.html>), TheDailyChronic.net (<http://www.thedailychronic.net/2017/79898/study-medical-cannabis-registrants-more-likely-to-cess-using-opioids-compared-to-non-participants/>), The Daily Beat (https://us.ivoox.com/en/jacob-vigil-part-i-medical-cannabis-program-audios-mp3_rf_22514026_1.html; <http://www.btrtoday.com/listen/thedailybeat/jacob-vigil-part-ii-cannabis-treating-pain/>), Marijuanastox.com (<http://marijuanastox.com/study-finds-medical-marijuana-reduced-opioid-use-new-mexico/>), Cannabiscarepa.org (<http://www.cannabiscarepa.org/mmj-usa/638429/study-medical-marijuana-an-alternative-for-opioids-2>), Gethigh.com (<https://www.gethigh.com/unm-study-suggests-cannabis-can-reduce-opioid-use/>), The Liberty Beacon (<http://www.thelibertybeacon.com/cannabis-can-end-the-use-of-prescription-pain-killers/>), Pot Network (<https://www.potnetwork.com/news/new-study-shows-strong-connection-between-mmj-use-and-opioid-reduction>), Mjnews.com (<http://mjnews.com/new-mexico-study-mmj-opioid-addiction/>), Greendorphin.com (<https://greendorphin.com/new-mexico-research-supports-argument-medical-cannabis-part-solution-opioid-crisis/>), Think Big (<http://bigthink.com/paul-ratner/how-legalizing-marijuana-may-end-the-opioid-crisis>), Pain News Network (<https://www.painnewsnetwork.org/stories/2017/12/4/medical-marijuana-will-not-cure-the-opioid-crisis>), Ilcbd.com (<https://ilcbd.com/two-new-studies-confirm-again-that-cannabis-reduces-opioid-merry-jane/>), Cannabiz Network (<https://www.cannabiznetwork.com/articles/new-mexico-study-finds-legalizing-mmj-reduces-opioid-use>), Civilized Life (<https://www.civilized.life/articles/marijuana-reduces-opioid-use-trump-administration/>), The National Marijuana News (<https://thenationalmarijuananeews.com/mj-news/states-may-be-better-suited-to-fight-the-opioid-epidemic-than-the-federal-government/>), Arizona Medical Marijuana Clinic (<https://arizonamedicalmarijuanaclinic.com/tag/medical-marijuana/>), Compassionate Certification Centers (<https://www.compassionatecertificationcenters.com/new-mexico-marijuana-program-finds-a-positive-reduction-of-opioid-addiction/>), The Cannifornian (<http://www.thecannifornian.com/cannabis-health/research-studies/study-medical-marijuana-alternative-opioids/>), Medical Marijuana Grow Guide (<http://www.medicalmarijuanagrowguide.com/study-medical-marijuana-has-potential-to-lessen-opioid-addictions/>), Medicalcannabis.com (<http://www.medicalcannabis.com/medical-cannabis-as-a-substitute-for-prescription-drugs/>), Dailyleafdeals.com (<http://dailyleafdeals.com/marijuana-decreases-opioid-use-study-says/>), Bestseedbank.com (<https://bestseedbank.com/study-medical-marijuana-has-potential-to-lessen-opioid-addictions/>), Stitcher.com (<https://www.stitcher.com/podcast/your-highness-podcast>), USHempmuseum.com (<http://ushempmuseum.com/blog/2017/11/21/study-medical-cannabis-registrants-more-likely-to-cess-using-opioids-compared-to-non-participants/>), mmjreporter.com (<http://mmjreporter.com/cara-therapeutics-inc-nasdaqcara-closes-in-red-32578.html>),

Rolling Stone (<https://www.rollingstone.com/culture/news/medical-pot-is-our-best-hope-to-fight-the-opioid-epidemic-w513653>), MDmarijuanadoctor.com (<http://mdmarijuanadoctor.com/unm-study-medical-marijuana-an-alternative-for-opioids/>), Wakeup-world.com (<https://wakeup-world.com/2017/12/10/how-cannabis-can-end-the-use-of-dangerous-prescription-pain-killers/>), Lawprofessors.typepad.com (http://lawprofessors.typepad.com/marijuana_law/2017/12/medical-pot-is-our-best-hope-to-fight-the-opioid-epidemic.html), Barchart.com (<https://www.barchart.com/story/stocks/quotes/VRTHF/125594/therapeutic-advancements-in-breakthrough-therapies-for-treating-chronic-pain-take-aim-at-reducing-opioid-use>), Merry Jane (<https://merryjane.com/health/legislators-urge-trump-administration-to-consider-medical-cannabis-as-alternative-to-opioids>), News.medicalmarijuanainc.com (<https://news.medicalmarijuanainc.com/university-new-mexico-researchers-find-evidence-mmjs-ability-help-solve-opioid-epidemic/>), ZZME Science (<https://www.zmescience.com/science/news-science/prescription-drugs-opioids-04332/>), PR Newswire (<https://www.prnewswire.com/news-releases/advanced-research-development-in-unique-cannabis-therapies-to-battle-opioid-addiction-for-safe-alternative-pain-relief-660499543.html>), Forbes (<https://www.forbes.com/sites/julieweed/2017/12/18/never-mind-california-canadas-opening-its-own-5b-cannabis-market-in-2018/#10c08acf5ae6>), Terpenes and Testing Magazine (<http://terpenesandtesting.com/veritas-ctl-x-cannabis-pain-study/>), Ohio Patient Network (<http://ohiopatientsnetwork.org/index.php/25-medical/101-new-mexico>), Botanika Life (<https://botanika.life/patients-legally-using-cannabis-stopped-used-less-opioids-dangerous-prescription-drugs/>), Marijuana.stocks.com (<https://marijuanastocks.com/scientists-believe-that-legalizing-marijuana-may-end-the-opioid-crisis-in-america/>), The American Academy of Pain Medicine (<http://www.painmed.org/research-library/>), Clearhealth.com (<https://clearhealthblog.wordpress.com/>), Goodtimes.sc (<https://goodtimes.sc/santa-cruz-news/social-impacts-legalized-cannabis/>), Drugsense.org (<http://druglawreform.com/legalizing-marijuana-may-end-the-opioid-crisis-say-scientists/>), Americans for Safe Access (<http://www.safeaccessnow.org/opioidblueprint>), Herb (<https://herb.co/2017/12/26/opioid-overdose-fentanyl-cannabis/>), Zenpype (<https://zenpype.com/can-cannabis-solve-the-current-opioid-crisis/>), Microbiome Digest (<https://microbiomedigest.com/category/extremophiles/>), ZME Science (<https://www.zmescience.com/science/news-science/prescription-drugs-opioids-04332/>), Business Insider Australia (<https://www.businessinsider.com.au/new-studies-health-effects-marijuana-2017-12>), Altnet (<https://www.altnet.org/drugs/how-legal-cannabis-improving-public-health-obesity-opioids-alcohol>), Vice (https://www.vice.com/en_us/article/paqqp/going-after-weed-in-the-middle-of-a-deadly-opioid-crisis-is-insane), Medical Marijuana Inc (<https://news.medicalmarijuanainc.com/university-new-mexico-researchers-find-evidence-mmjs-ability-help-solve-opioid-epidemic/>), Konbini (<http://www.konbini.com/us/lifestyle/cannabis-stop-from-using-harder-dangerous-drugs/>), Your Health Guide (<http://urhealthguide.com/cannabis-can-end-use-dangerous-prescription-pain-killers/>), Entrepreneur (<https://www.greenentrepreneur.com/article/318020>), Alibi (<https://alibi.com/cannabis/56435/Writing-On-the-Wall.html>), High Times (<https://hightimes.com/news/study-finds-cannabis-treatment-option-schizophrenia/>), Cannabis News Journal (<http://www.cannabisnewsjournal.co/2018/07/affordable-and-accredited-medical.html>), Medical Marijuana Inc. (<https://news.medicalmarijuanainc.com/new-mexico-mmj-dispensaries-contribute-2k-for>

marijuana-research/), 420 Intel (<https://420intel.com/articles/2018/08/15/study-finds-cannabis-may-be-treatment-option-schizophrenia>), Fldispensaries.com (<https://fldispensaries.com/study-finds-cannabis-may-be-treatment-option-for-schizophrenia/>), Pot Network (<https://www.potnetwork.com/news/new-york-oks-medical-marijuana-stem-opioid-crisis>), Straight Cannabis (<https://straightcannabis.ca/519/study-finds-cannabis-may-be-treatment-option-schizophrenia>), MJ Business Daily (<https://mjbizdaily.com/new-mexico-dispensaries-contribute-2k-to-universitys-medical-marijuana-research/>), Cheap Home Grow (<https://cheaphomegrow.com/doctors-researchers/>), Maryjane 420 All Day (<https://www.maryjane420allday.com/cannabis-may-be-a-treatment-option-for-schizophrenia/>), Denver Daze (<https://denverdaze.com/study-finds-cannabis-may-be-treatment-option-for-schizophrenia/>), Medispensaries (<https://medispensaries.com/study-finds-cannabis-may-be-treatment-option-for-schizophrenia/>), Cannabis News Journal (<https://cannabisnewsworld.com/2018/09/03/usinnovative-study-shows-medical-cannabis-effective-in-treating-a-wide-range-of-health-conditions/>), Science Daily (<https://www.sciencedaily.com/releases/2018/09/180910173731.htm>), European Pharmaceutical Review (<https://www.europeanpharmaceuticalreview.com/news/78937/cannabis-decrease-symptoms/>), Weed Reader (<https://weedreader.com/cannabis-effective-schizophrenia/>), US News & World Report (<https://www.usnews.com/news/health-care-news/articles/2018-09-11/study-medical-marijuana-relieves-range-of-symptoms-with-no-serious-side-effects>), Alibi (<https://alibi.com/cannabis/56666/News-on-the-Green.html>), Pain News Network (<https://www.painnewsnetwork.org/stories/>), World News Trust (<https://worldnewstrust.com/study-shows-medical-cannabis-effective-in-treating-a-wide-range-of-health-conditions-jacob-miguel-vigil-and-sarah-see-stith>), Standard Digital (<https://www.standardmedia.co.ke/health/article/2001295343/study-shows-medical-cannabis-effective-in-treating-various-health-conditions>), Illinois Dispensaries and Doctors (<https://ilcbd.com/study-finds-cannabis-may-be-treatment-option-for-schizophrenia/>), Carolina Cannabis News (<https://carolinacannabisnews.com/qa-with-the-ceo-of-releaf-a-cannabis-journal-app/>), News Medical Life Sciences (<https://www.news-medical.net/news/20180911/Medical-cannabis-provides-relief-across-dozens-of-health-symptoms-study-shows.aspx>), Lab Roots (<https://www.labroots.com/trending/videos/12637/cbd-help-insomnia>), 710 Chronicle (<https://www.710chronicle.com/new-mexico-dispensaries-donate-2000-to-universitys-medical-cannabis-program/>), Blockhead Brands (<https://www.blockheadbrands.com/articles/2018/8/31/study-finds-cannabis-may-be-treatment-option-for-schizophrenia>), The Joint Blog (<https://thejointblog.com/study-cannabis-can-help-treat-schizophrenia-offering-a-fresh-start-and-newfound-hope/>), Health Central (<https://www.healthcentral.com/article/mobile-app-shows-medical-marijuana-relieves-a-variety-of-symptoms>), Lab Manager (<https://www.labmanager.com/news/2018/09/unm-study-shows-medical-cannabis-effective-in-treating-a-wide-range-of-health-conditions#.W5iewehKjIU>), Gfarma News (<http://gfarma.news/health-news/study-medical-marijuana-relieves-range-of-symptoms-with-no-serious-side-effects/>), Scien. Mag (<https://scienmag.com/unm-study-shows-medical-cannabis-effective-in-treating-a-wide-range-of-health-conditions/>), Kenyan Digest (<https://www.kenyandigest.com/us-scholars-back-medical-cannabis-kenya/>), Medical Xpress (<https://medicalxpress.com/news/2018-09-medical-cannabis-effective-wide-range.html>), News.am (<https://med.news.am/eng/news/19443/medical-cannabis-effective-in-treating-a-wide-range-of-health-conditions.html>), Knowridge Science Report (<https://knowridge.com/2018/09/medical-cannabis-could-treat-many-health-problems->

effectively/), Live Trading News (<https://www.livetradingnews.com/medical-cannabis-effective-in-treating-a-wide-range-of-health-conditions-105780.html#.W5njbehKjIV>), The Edition Truth (<http://www.editiontruth.com/cannabis-can-effective-treatment-numerous-health-conditions/>), Merry Jane (<https://merryjane.com/health/94-percent-of-medical-marijuana-users-find-relief-in-cannabis-new-studies-find>), Medicalresearch.com (<https://medicalresearch.com/pain-research/patient-reported-symptom-relief-following-medical-cannabis-consumption/44459/>), New Haven Register (<https://www.nhregister.com/news/article/New-Study-Confirms-What-Many-Already-Know-13143417.php>), Marijuana Herald (<https://themarijuanaherald.com/marijuana-research/study-eating-raw-cannabis-associated-with-significant-improvements-in-insomnia-patients/>), Hemp Gazette (<https://www.hempgazette.com/news/raw-cannabis-insomnia-hg0707/>), Alibi (<https://alibi.com/cannabis/56666/News-on-the-Green.html>), NYMMJ.com (<https://nymmj.com/7753/marijuana-news/marijuana-helps-insomnia-sufferers-study-finds/>), You Can Quit (<https://youcanquitnow.com/new-study-confirms-what-many-already-know-cannabis-helps-treat-insomnia/>), Medical Brief (<https://www.medicalbrief.co.za/archives/medical-cannabis-provides-symptom-relief-myriad-complaints/>), Yubanet (<https://yubanet.com/scitech/innovative-study-shows-medical-cannabis-effective-in-treating-a-wide-range-of-health-conditions/>), Culture Magazine (<https://culturemagazine.com/two-new-studies-show-cannabis-treatment-alleviates-symptoms-with-less-side-effects/>), Standard Digital (<https://www.standardmedia.co.ke/health/article/2001295343/study-shows-medical-cannabis-effective-in-treating-various-health-conditions>), Cannabis Tech (<https://www.cannabistech.com/articles/cannabis-technology-provides-improved-patient-data/>), Seven Figure Publishing (<https://sevenfigurepublishing.com/2018/09/19/moving-out/>), American Laboratory (<https://www.americanlaboratory.com/353494-Studies-Reveal-Striking-Results-of-Effects-of-Medical-Cannabis/>), Santa Fe Reporter (<https://www.sfreporter.com/news/leafbrief/2018/09/20/leaf-brief-5/>), Garden Culture Magazine (<https://gardenculturemagazine.com/against-the-grain/studies-show-medical-cannabis-can-help-wide-range-of-health-problems/>), Marijuana And The Law (<https://www.marijuanaandthelaw.com/innovative-study-medical-cannabis-effective-treating-numerous-health-conditions/>), Medical Marijuana, Inc. (<https://news.medicalmarijuanainc.com/new-study-shows-marijuana-effective-for-wide-array-of-symptoms/>), Dabs Magazine (<https://dabsmagazine.com/cell-phone-studies-show-cannabis-effective-in-treating-host-of-illnesses/>), Bioengineer (<https://bioengineer.org/unm-study-shows-medical-cannabis-effective-in-treating-a-wide-range-of-health-conditions/>), Cannabis Studies (<http://cannabisstudies.com/2018/09/11/medical-cannabis-effective-in-treating-a-wide-range-of-health/>), Health Minute (<https://healthminute.org/2018/09/medical-cannabis-could-treat-many-health-problems-effectively/>), Specialty Pharmacy Times (<https://www.specialtypharmacytimes.com/news/mobile-app-tracking-data-suggest-cannabis-relieves-symptoms-in-variety-of-health-conditions>), The Hill. (<https://thehill.com/opinion/healthcare/376643-new-studies-show-that-legal-cannabis-access-reduces-opioid-abuse>), The Jerusalem Post (<https://www.jpost.com/Opinion/Cannabis-and-schizophrenia-539277>), Independent (<https://www.independent.co.uk/life-style/health-and-families/study-marijuana-hard-drugs-prevent-gateway-study-addiction-jacob-miguel-vigil-new-mexico-a7960616.html>), Cannabis News Box (<https://cannabisnewsbox.com/5772/medicinal-cannabis/unm-researchers-discover-cannabis-potential-for-symptom-relief/>), IFL Science (<https://www.iflscience.com/health-and-medicine/medicinal-cannabis-could-lead-to-a-drop-in-use-of-dangerous-opioids/>), Marijuana.com

(<https://www.marijuana.com/news/2017/09/new-study-finds-legal-cannabis-equals-fewer-pharmaceuticals/>), The Hill. (<https://thehill.com/opinion/healthcare/356702-trumps-opioid-agency-fails-to-cite-marijuanas-benefits-despite-mounting>), WV News (https://www.wvnews.com/statejournal/news/new-study-suggests-marijuana-leads-to-lower-opioid-prescriptions/article_6333e88f-d04d-5fec-8921-3a16647692c2.html), Chron.com (<https://m.chron.com/news/article/New-Study-Confirms-What-Many-Already-Know-13143417.php>), Stockprice.com (<https://stockprice.com/stock-market-sectors/mobile-app-tracking-data-shows-cannabis-relieves-symptoms-in-a-number-of-health-issues-2018-09-28/>), Cision PR Newswire (<https://www.prnewswire.com/news-releases/the-global-cannabis-market-is-expected-to-grow-as-more-countries-eye-legalization-863873942.html>), Market Watch (<https://www.marketwatch.com/press-release/the-global-cannabis-market-is-expected-to-grow-as-more-countries-eye-legalization-2018-11-05>), Med India (<https://www.medindia.net/health-press-release/medical-products-help-popularize-legal-cannabis-use-393298-1.htm>), ADDitude (<https://www.additudemag.com/cbd-oil-adhd-symptoms-natural-treatment/>), Eurasia Review (<http://www.eurasiareview.com/27062016-how-us-federal-government-limits-valid-scientific-research-on-marijuana/>), KRQE News (<https://www.krqe.com/news/albuquerque-metro/medical-cannabis-dispensaries-manufacturers-help-fund-research-at-unm/1187521225>), New Zealand Herald (https://www.nzherald.co.nz/lifestyle/news/article.cfm?c_id=6&objectid=11483203), Pain News Network (<https://www.painnewsnetwork.org/stories/2018/9/11/releaf-app-helps-document-effectiveness-of-medical-marijuana>), RX Leaf (<https://www.rxleaf.com/post/14288/new-releaf-cannabis-app-reveals-significant-symptoms-relief-for-anxiety-depression-and-insomnia>), The Society for Post-Acute and Long-Term Care Medicine (<https://paltc.org/newsroom/science-says-patients-prefer-pot-over-pills>), Cannabis Tech (<https://www.cannabistech.com/articles/beyond-cbd-hemp-is-remedy-for-a-wasteful-fossil-based-planet/>), Weedmaps (<https://news.weedmaps.com/2019/01/researchers-find-cbd-may-be-safe-for-schizophrenia-patients/>), Okomedes (<https://www.okomedes.com/medical-innovation-and-translation-news-by-okomedes/>), Marijuana Retail Report (<https://marijuanaretailreport.com/the-global-cannabis-market-is-expected-to-grow-as-more-countries-eye-legalization/>), Cannabis Brightline (<https://www.cannabisbrightline.com/2018/12/your-brain-on-drugs/>), Digital Journal (<http://www.digitaljournal.com/tech-and-science/science/why-cannabis-affects-women-differently-to-men/article/536167>), Genetic Literacy Project (<https://geneticliteracyproject.org/2018/11/12/why-marijuana-might-not-be-such-a-great-weapon-to-fight-opioid-addiction/>), The Stranger (<https://www.thestranger.com/slog/2019/02/20/39129798/no-new-hampshire-cannabis-does-not-cause-heroin-addiction>), Forbes (<https://www.forbes.com/sites/javierhasse/2019/02/27/study-patients-find-more-relief-in-marijuanas-psychoactive-compound-thc-than-in-cbd/#2e342f66717a>), Vice.com (https://www.vice.com/en_uk/article/j57byx/having-frequent-terrifying-dreams-could-mean-you-have-nightmare-disorder), Specialty Pharmacy Times (<https://www.specialtypharmacytimes.com/news/mobile-app-tracking-data-suggest-cannabis-relieves-symptoms-in-variety-of-health-conditions>), Science Daily (<https://www.sciencedaily.com/releases/2019/02/190226112353.htm>), Technology Networks (<https://www.technologynetworks.com/tn/news/self-reported-health-symptom-relief-gauged-for-cannabis-product-characteristics-316013>), Pain News Network (<https://www.painnewsnetwork.org/stories/2019/2/27/study-thc-more-effective-than-cbd-in-treating-pain>), Civilized Life (<https://www.civilized.life/articles/thc-might-have-more>

medical-value-than-cbd-says-cannabis-study/), Sciencemag.com (<https://sciencemag.com/thc-found-more-important-for-therapeutic-effects-in-cannabis-than-originally-thought/>), Live Science (<https://www.livescience.com/64886-thc-cbd-marijuana-therapeutic-effects.html>), Semantic Scholar ([https://www.semanticscholar.org/paper/Cannabidiol-\(CBD\)-as-an-Adjunctive-Therapy-in-A-Mcguire-Robson/3df3230aadf05436a16166dcabdc3ddd0ccd4ad6](https://www.semanticscholar.org/paper/Cannabidiol-(CBD)-as-an-Adjunctive-Therapy-in-A-Mcguire-Robson/3df3230aadf05436a16166dcabdc3ddd0ccd4ad6)), Eureck Alert (https://eurekaalert.org/pub_releases/2019-02/uonm-tfm022619.phporocas), Oro Cas Reflects (<https://orocasreflects.com/2017/03/18/unm-study-suggests-medical-marijuana-could-decrease-prescription-opiate-abuse/>), CBDADHD.nl (<https://cbdadhd.nl/>), Inverse (<https://www.inverse.com/article/53613-can-an-app-tell-whether-you-re-high>), Medical Xpress (<https://medicalxpress.com/news/2019-02-thc-important-therapeutic-effects-cannabis.html>), Best of Life Central (<https://bestoflifecentral.com/2019/02/27/releaf-app-study-suggests-thc-is-as-important-as-cbd-in-medical-marijuana-inverse/>), Toking Times (<https://www.tokingtimes.com/thc-may-be-more-effective-than-cbd/>), Technology Networks (<https://www.technologynetworks.com/tn/news/self-reported-health-symptom-relief-gauged-for-cannabis-product-characteristics-316013>), Futurism (<https://futurism.com/the-byte/thc-therapeutic-benefits>), The French Toast (<https://thefreshtoast.com/cannabis/marijuana-study-thc-could-have-more-medical-value-than-cbd/>), Ganjapreneur (<https://www.ganjapreneur.com/study-reveals-broad-therapeutic-impact-of-thc/>), Lab Manager (<https://www.labmanager.com/news/2019/02/thc-more-important-for-therapeutic-effects-in-cannabis-than-previously-believed#.XHg2J-hKjIU>), 420 Intel (<https://420intel.com/articles/2019/02/28/thc-might-have-more-medical-value-cbd-says-cannabis-study>), Health News Digest (<http://www.healthnewsdigest.com/news/cannabis0/THC-Found-More-Important-for-Therapeutic-Effects-in-Cannabis-Than-Originally-Thought.shtml>), North Coast Journal (<https://www.northcoastjournal.com/humboldt/science-and-the-looming-cannapocalypse/Content?oid=13172300>), Hemp Gazette (<https://www.hempgazette.com/news/thc-cbd-therapy-hg0861/>), Cannabis Now (<https://cannabisnow.com/app-based-study-finds-thc-has-more-therapeutic-benefit-than-cbd/>), Elexonic (<https://elexonic.com/2019/03/01/which-marijuana-compound-is-more-beneficial/>), CBD Testers (<https://www.cbdtesters.co/2019/03/01/thc-benefits/>), The Cannabis Radar (<https://thecannabisradar.com/new-therapeutic-uses-for-cannabis-discovered/196/>), Benzinga (<https://www.benzinga.com/markets/cannabis/19/03/13282849/pot-stocks-etfs-top-news-and-data-from-the-cannabis-industry-this-we>), Bud Syn. (<http://budsyn.com/news/cbd/app-based-study-finds-thc-has-more-therapeutic-benefit-than-cbd/>), Med India (<https://www.medindia.net/news/thc-found-more-important-for-therapeutic-effects-in-cannabis-186200-1.htm>), Day and Night Global News (<http://www.dayandnightnews.org/2019/02/26/thc-more-important-for-therapeutic-effects-in-cannabis-than-previously-believed/>), Drugs Inc. (<https://drugsinc.eu/onderzoek-patienten-vinden-meer-verlichting-in-marihuana-psychoactieve-verbinding-thc-dan-in-cbd/>), Alibi (<https://alibi.com/cannabis/58017/News-on-the-Green-Mining-App-Data.html>), Marihuana Medicinal Mexico (<http://www.marihuanamedicinalmexico.com/2019/02/27/thc-vs-cbd/>), Albuquerque Journal (<https://www.abqjournal.com/1287801/study-smoking-most-effective-way-for-patients-to-use-pot.html>), Analytical Cannabis (<https://www.analyticalcannabis.com/news/thc-has-a-more-important-therapeutic-effect-in-cannabis-than-originally-thought-311509>), International High Life (<https://internationalhighlife.com/consume-cannabis-before-bed/>), Interested Party

(<http://interested-party.blogspot.com/2019/03/unm-study-all-cannabis-ingestion-is.html>), The Growth Op (<https://www.thegrowthop.com/cannabis-health/marijuana-study-thc-could-have-more-medical-value-than-cbd>), Detroit Metro Times (<https://www.metrotimes.com/detroit/gov-whitmer-provides-breathes-fresh-air-by-disbanding-inept-marijuana-licensing-board/Content?oid=20647299>), CT Post (<https://www.ctpost.com/news/article/Move-Aside-CBD-New-Data-Finds-THC-Is-the-Real-13672973.php>), Hemp Me News (<http://hempmenews.com/marijuana-study-thc-could-have-more-medical-value-than-cbd/>), The World News (<https://theworldnews.net/us-news/move-aside-cbd-new-data-finds-thc-is-the-real-medicine-in-medical-marijuana>), Greenwich Time (<https://www.greenwichtime.com/news/article/Move-Aside-CBD-New-Data-Finds-THC-Is-the-Real-13672973.php>), Pain Week (<https://www.painweek.org/media/news/cannabis-components-which-provides-greater-therapeutic-benefit>), Shilfa.com (<https://shilfa.com/slovakia/one-recent-study-shows-thc-has-more-therapeutic-benefits-than-we-have-thought-so-far/>), Le Cannabiste (<https://lecannabiste.com/etude-le-thc-plus-efficace-que-le-cbd-sur-la-douleur/>), Stamford Advocate (<https://www.stamfordadvocate.com/news/article/Move-Aside-CBD-New-Data-Finds-THC-Is-the-Real-13672973.php>), Smoke Buddies (<http://www.smokebuddies.com.br/thc-vs-cbd-qual-composto-da-maconha-e-mais-benefico/>), Zodab (<https://zodab.com/science/thc-found-more-important-for-therapeutic-effects-in-cannabis-than-originally-thought>), Cannabis Business Executive (<https://www.cannabisbusinessexecutive.com/2019/03/thc-vs-cbd-which-marijuana-compound-is-more-beneficial/>), News Times (<https://www.newstimes.com/news/article/Move-Aside-CBD-New-Data-Finds-THC-Is-the-Real-13672973.php>), True Viral News (<https://trueviralnews.com/study-thc-has-more-therapeutic-benefits-than-we-thought/>), Veterans Today (<https://www.veteranstoday.com/2019/03/02/thc-vs-cbd-which-is-more-beneficial/>), Kandabis (<https://kandabis.be/2019/02/28/study-reveals-broad-therapeutic-impact-of-thc/>), Green Entrepreneur (<https://www.greenentrepreneur.com/article/329354>), My San Antonio (<https://www.mysanantonio.com/news/article/Move-Aside-CBD-New-Data-Finds-THC-Is-the-Real-13672973.php>), Flower Town (<https://www.flowertown.com/health/cannabis-and-ptsd/>), Cannabis.net (<https://cannabis.net/blog/medical/thc-has-more-potent-medicinal-properties-than-cbd-says-study>), AZ Marijuana (<https://azmarijuana.com/marijuana-news/smoking-marijuana-is-the-most-effective-method-study-finds/>), Medical Marijuana 411 (<https://medicalmarijuana411.com/medicinal-benefits-of-thc/>), Canniseur (<https://canniseur.com/author/ryanboetel/>), Huffsnuffs (<https://www.huffsnuffs.com/new-research-suggests-thc-may-be-medically-better-than-cbd/>), CBD Oils Legal (<https://cbdoilslegal.com/new-research-suggests-thc-may-be-medically-better-than-cbd-huffs-n-puffs/>), CBD Forum (<http://cbdforum.com/category/cbdnews/>), Cannabidiol CBD (<https://cannabidiolcbd.org/move-aside-cbd-new-data-finds-thc-is-the-real-medicine-in-medical-marijuana-green-entrepreneur/>), Leafly (<https://www.leafly.de/thc-medizinisches-effektiver-als-cbd/>), KRQE (<https://www.krqe.com/news/albuquerque-metro/unm-researchers-solving-gaps-in-cannabis-thc-with-help-from-a-mobile-app/1842008513>), Texas Marijuana Policy (<https://www.texasmarijuanapolicy.org/2019/03/08/texas-more-than-50-marijuana-bills-filed-and-counting/>), Live Past 100 Well (<https://livepast100well.com/thc-is-found-to-be-very-important-for-therapeutic-benefits-of-cannabis/>), Medical Marijuana Radio (<https://medicalmarijuanaradio.com/mmjradio-03-09-2019-s10e10-mmjnews-guest-jacob-m-vigil-cannabis-researcher-unm/>), News

Medical Life Sciences (<https://www.news-medical.net/whitepaper/20190314/Barriers-in-Cannabis-Research-and-Analysis.aspx>), Pittcon.org (<https://pittcon.org/cannabis-trends-in-analytical-research/>), Player FM (<https://player.fm/series/dr-howard-smith-oncall/thc-drives-most-benefit-from-weed-use>), Break Free Medicine (<http://dr-lobisco.com/the-semi-final-review-of-cbd-oil-for-pain-brain-and-neurological-strain-and-the-limitations-of-non-clinical-trials/>), Bristol Bud (<https://bristolbud.buzz/2019/02/26/thc-found-more-important-for-therapeutic-effects-in-cannabis-than-originally-thought/>), Maitri (<https://www.maitrimedicinals.com/blog/2019/3/13/new-study-reveals-therapeutic-benefits-of-thc>), Pot Portal (<https://potportal.net/study-suggests-medicinal-benefits-of-thc-may-outweigh-those-of-cbd/>), Cyber Med Life (<https://www.cybermedlife.eu/index.php/health/5319-getting-high-and-well-it-s-the-thc-in-cannabis-that-matters-the-most>), Info Contemporary (<https://www.infocontemporary.com/2019/03/04/the-best-marijuana-compound-thc-vs-cbd/>), Easy Health Options (<https://easyhealthoptions.com/thc-health-benefits-cbd-cannabis/>), RNZ (<https://www.radionz.co.nz/national/programmes/sunday/audio/2018686941/jacob-vigil-the-truth-about-medicinal-cannabis>), UK Health World (<http://ukhealthworld.com/2019/03/17/study-patients-find-more-relief-in-marijuanas-psychoactive-compound-thc-than-in-cbd/>), Global Health Times (<http://globalhealthtimes.com/2019/03/20/research-finds-thc-more-effective-than-cbd-for-treating-pain/>), Maitri Medicinals (<https://www.maitrimedicinals.com/blog>), Stanford Advocate (<https://www.stanfordadvocate.com/news/article/Move-Aside-CBD-New-Data-Finds-THC-Is-the-Real-13672973.php>), 420 Magazine (<https://www.420magazine.com/science/thc-vs-cbd-which-marijuana-compound-is-more-beneficial/>), Health and Wellness (<http://integrativehealthwellness.org/2019/03/24/which-has-better-health-effects-thc-or-cbd-in-marijuana/>), T Nation (<https://www.t-nation.com/pharma/tip-heres-why-your-cbd-oil-kind-a-sucks>), Regina Leader-Post (<https://leaderpost.com/cannabis-health/marijuana-study-thc-could-have-more-medical-value-than-cbd/wcm/f7666cd3-580e-4ef6-af77-72615d3c3da2>), Allergies vs. Cold (<https://www.allergiesvscold.com/which-has-better-health-effects-thc-or-cbd-in-marijuana/>), Bioengineer (<https://bioengineer.org/thc-found-more-important-for-therapeutic-effects-in-cannabis-than-originally-thought/>), Steemit (<https://steemit.com/cannabis/@ganjapreneur/studyexpoundstherapeuticimpactofthc-2xengafddn>), Genius Now (<http://www.geniusnow.com/2019/02/27/thc-important-for-therapeutic-effects-in-cannabis/>), My Cannabies (<https://mycannabies.com/business/notorious-psychoactive-chemical-thc-more-important-for-therapeutic-effects-in-cannabis-than-previously-believed-unm-newsroom/>), Marijuanastox.com (<https://marijuanastox.com/higher-levels-of-thc-offer-patients-relief-while-cbd-amount-is-irrelevant-says-new-study/>), World News Trust (<https://worldnewstrust.com/study-shows-medical-cannabis-effective-in-treating-a-wide-range-of-health-conditions-jacob-miguel-vigil-and-sarah-see-stith>), Eco Hemp Oil (<https://ecohempoil.com/2019/03/27/study-suggests-medicinal-added-benefits-of-thc-could-outweigh-these-of-cbd/>), Techodom (<https://techodom.com/thc-has-more-therapeutic-benefits-than-we-thought/>), Top Class Reporters (<http://www.topclassreporters.com/view?topclassreporters=Marijuana-prevents-people-from-doing-%27hard%27-drugs,-claims-study>), Alpha Extracts (<https://www.alphaextracts.ca/article/study-thc-has-more-therapeutic-benefits-than-we-thought>), Lifeboat Foundation (<https://lifeboat.com/blog/2018/09/study-shows-medical-cannabis-effective-in-treating-a-wide-range-of-health-conditions>), Player FM (<https://player.fm/series/podcasts360/medical-cannabis-could-thc-have-more-benefit>

than-cbd-for-symptom-relief), Green Grass (<https://greengrass.co.nz/could-thc-be-the-real-medicine-in-medicinal-cannabis/>), Law Professors Blogs Network (https://lawprofessors.typepad.com/marijuana_law/medical-marijuana-commentary-and-debate/), Cannabis News Wire (<https://www.cannabisnewswire.com/420-with-cnw-thc-may-be-more-therapeutic-than-cbd-study-finds/>), Prevention (<https://www.prevention.com/health/a27021723/cbd-for-sleep/>), Bustle (<https://www.bustle.com/p/is-cbd-scientifically-proven-experts-evaluate-the-3-most-common-claims-17014778>), Laboratory Equipment (<https://www.laboratoryequipment.com/news/2018/09/medical-cannabis-effective-treating-range-conditions>), Cannabidiol CBD (<https://cannabidiolcbd.org/study-patients-find-more-relief-in-marijuanas-psychoactive-compound-thc-than-in-cbd-forbes/>), Health CBD Vape (<https://healthcbd vape.com/2019/04/17/study-suggests-medicinal-added-benefits-of-thc-may-well-outweigh-these-of-cbd/>), UNM Advance (<https://advance.unm.edu/2019/05/14/married-scientists-conduct-innovative-cannabis-research-at-unm/>), Axis Wire (<https://www.axiswire.com/researchers-and-veteran-nonprofit-use-releaf-app-to-help-former-soldiers-understand-cannabis-usage/>), PROHBTd (<https://prohbt.com/thc-more-therapeutic-than-previously-thought>), Canapac Consulting (<http://www.canapac.com/news/>), Sweet Releaf (<https://www.sweetreleaf.com/cbd/thc-or-cbd-new-study-discovers-truth/>), KRQE (<https://www.krqe.com/news/albuquerque-metro/unm-researchers-studying-effects-of-cannabis-on-veterans-with-ptsd/2018165619>), Advance at UNM (<https://advance.unm.edu/2019/05/14/married-scientists-conduct-innovative-cannabis-research-at-unm/>), RX Leaf (<https://www.rxleaf.com/health-benefits-thc-oil-vape-smoke/>), Era of Light (<https://eraoflight.com/2019/06/05/move-aside-cbd-new-data-finds-thc-is-the-real-medicine-in-medical-marijuana/>), The Natural Remedy (<https://thenaturalremedy.ca/2019/cannabis-science/recent-study-shows-thc-is-medicine-too/>), The Stranger (<https://www.thestranger.com/slog/2019/05/22/40274855/study-shows-cbd-may-be-effective-for-opioid-treatment>), Alibi (<https://alibi.com/cannabis/58806/Hope-Abounds.html>), Kalapa Clinic (<https://www.kalapa-clinic.com/en/influence-medicinal-cannabis-sleep-disorders/>), Inverse (<https://www.inverse.com/article/56802-cbd-weird-dreams>), Times of CBD (<https://timesofcbd.com/cbd-may-be-giving-people-unusual-dreams-as-cannabidiol-nightmare-stories-start-to-surface/>), Standard Dose (<https://standarddose.com/blogs/the-drop/using-cbd-for-sleep>), Free Think (<https://www.freethink.com/articles/scientists-sidestep-restrictions-cannabis-research>), U.S. Health Post (<https://ushealthpost.com/2019/07/06/study-thc-more-effective-than-cbd-in-treating-pain/>), Cannabis Wire (<https://cannabiswire.com/2019/07/18/qa-is-the-new-mexico-va-hobbling-cannabis-research/>), Word on the Tree (<https://wordonthetree.com/2019/07/18/the-fate-of-marijuana-reform-lies-with-three-republican-senators/>), CBD Oil Trip (<https://cbdooltrip.com/2019/07/10/can-hashish-deal-with-add-signs-5/>), Cannabis Activism Now (<https://cannabisactivismnow.com/move-aside-cbd-new-data-finds-thc-is-the-real-medicine-in-medical-cannabis/>), Alibi (<https://alibi.com/cannabis/58868/THC-vs-CBD.html>), Scientific Inquirer (<https://scientificinquirer.com/2019/08/06/thc-may-be-more-effective-therapeutically-than-cbd-study/>), The Growth Op (<https://www.thegrowthop.com/cannabis-health/u-s-college-students-using-cannabis-to-help-get-some-shut-eye-experience-next-day-fatigue>), Chicago Tribune (<https://www.chicagotribune.com/marijuana/sns-tft-thc-more-medical-value-than-cbd-20190820-ypq6zgzbpf5hdlwur3p3iwnne-story.html>), Marijuana Moment (<https://www.marijuanamoment.net/marijuana-flower-offers-more-pain-relief-than-other-cannabis-products-study-finds/>), The Breaking News

(<https://breakingnewstrending.com/2019/08/21/cannabis-is-effective-at-reducing-pain-and-may-be-an-alternative-to-opioids-with-relatively-minimal-negative-side-effects-suggests-new-study-of-mobile-app-data-which-found-that-the-average-user-ha/>), Natural Blaze (<https://www.naturalblaze.com/2019/08/study-confirms-cannabis-is-effective-natural-medicine-to-significantly-alleviate-pain.html>), Medical Xpress (<https://medicalxpress.com/news/2019-08-cannabis-effective-mid-level-analgesic-medication.html>), News Medical Life Sciences (<https://www.news-medical.net/news/20190821/UNM-researchers-find-strong-evidence-that-cannabis-can-significantly-alleviate-pain.aspx>), Science Codex (<https://www.sciencecodex.com/unm-study-confirms-cannabis-flower-effective-mid-level-analgesic-medication-pain-632181>), Neuroscience News (<https://neurosciencenews.com/cannabis-flower-pain-14759/>), 7th Space (http://7thspace.com/headlines/944149/unm_study_confirms_cannabis_flower_is_an_effective_mid_level_analgesic_medication_for_pain.html), Times of CBD (<https://timesofcbd.com/new-cannabis-pain-relief-study-concludes-marijuana-flowers-potency-is-best-pain-relief-benefits/>), The Informant (<https://theinformant.cl/cannabis-flower-is-an-effective-mid-level-analgesic-medication-for-pain/>), Before Its News (<https://beforeitsnews.com/health/2019/08/study-confirms-cannabis-is-effective-natural-medicine-to-significantly-alleviate-pain-2971682.html>), Debug Lies News (<https://debuglies.com/2019/08/21/cannabis-is-very-effective-at-reducing-pain-with-relatively-minimal-negative-side-effects/>), Scienmag (<https://scienmag.com/unm-study-confirms-cannabis-flower-is-an-effective-mid-level-analgesic-medication-for-pain/>), Science Blog (<https://scienceblog.com/509685/study-confirms-cannabis-flower-is-an-effective-mid-level-analgesic-medication-for-pain-treatment/>), Mirage News (<https://www.miragenews.com/unm-study-confirms-cannabis-flower-is-an-effective-mid-level-analgesic-medication-for-pain-treatment/>), Long Room (<https://www.longroom.com/discussion/1601522/cannabis-flower-is-an-effective-mid-level-analgesic-medication-for-pain>), Media 9 Network (<https://www.media9network.com/2019/08/19/thc-is-much-more-very-important-to-healing-4/>), EcoTopical (<https://ecotopical.com/sciencedaily/265906/cannabis-flower-effective-mid-level-analgesic-medication/>), Parallel State (<https://www.parallelstate.com/news/cannabis-flower-is-an-effective-mid-level-analgesic-medication-for-pain/163056>), Zoomer (<https://www.everythingzoomer.com/health/longevity/2019/08/22/cannabis-pain-relief/>), News Wise (<https://www.newswise.com//articles/unm-study-confirms-cannabis-flower-is-an-effective-mid-level-analgesic-medication-for-pain>), Nature World News (<https://www.natureworldnews.com/articles/41955/20190822/unm-study-confirms-cannabis-flower-is-an-effective-mid-level-analgesic-medication-for-pain.htm>), NeuroscienceNews.com (<https://neurosciencenews.com/cannabis-flower-pain-14759/>), My Best Medicine (<http://mybestmedicine.com/health-news/cannabis-flower-is-an-effective-mid-level-analgesic-medication-for-pain-researchers-use-mobile-app-to-measure-how-commercially-available-cannabis-products-affect-pain-intensity/>), Analytical Cannabis (<https://www.analyticalcannabis.com/articles/high-thc-cannabis-offers-better-pain-relief-than-opioids-study-finds-311862>), Market Research Finance (<http://marketresearchfinance.com/2019/08/22/cannabis-is-an-effective-pain-killer-researchers-confirm-again/>), Prosper CBD News (<https://prospercbdnews.com/new-study-scientists-look-the-effectiveness-of-cannabis-for-pain-relief/541/>), Devdiscourse (<https://www.devdiscourse.com/article/health/642977-study-confirms-cannabis-can-significantly-alleviate-pain>), KRQE (<https://www.krqe.com/news/albuquerque-metro/unm-study-examines-effectiveness-of-cannabis-for-treating-pain/>), Microsoft News

Network (<https://www.msn.com/en-ca/health/medical/study-confirms-cannabis-a-safe-effective-pain-killer/ar-AAGcsQq>), Merry Jane (<https://merryjane.com/news/whole-cannabis-flower-relieves-pain-more-than-other-weed-products-study-shows>), Fence Preschool (<https://www.fencepreschool.co.uk/2019/08/22/thc-is-much-more-very-important-to-healing-15/>), Money Works Magazine (<https://www.moneyworksmagazine.com/u-s-college-students-using-cannabis-to-help-get-some-shut-eye-experience-next-day-fatigue/>), Press From (<https://pressfrom.info/ca/lifestyle/health/-160109-study-confirms-cannabis-a-safe-effective-pain-killer.html>), Clear Healthlife (<https://clearhealthlife.com/2019/08/22/university-of-new-mexico-study-confirms-cannabis-effective-for-pain-treatment/>), International Cannographic (<https://www.icmag.com/ic/showthread.php?t=365787>), Lab Manager (<https://www.labmanager.com/news/2019/08/study-confirms-cannabis-flower-is-an-effective-mid-level-analgesic-medication-for-pain#.XWFQcnt7lPZ>), Knowridge Science Report (<https://knowridge.com/2019/08/cannabis-flower-can-be-an-effective-medicine-for-pain-relief/>), Detroit Metro Times (<https://www.metrotimes.com/detroit/smoking-good-old-fashioned-flowers-is-the-best-way-to-ingest-cannabis-for-pain-relief-according-to-study/Content?oid=22469990>), Pharmacist Steve (<http://www.pharmaciststeve.com/?p=31357>), Daily News Magazine (<https://dailynewsmagazine.us/267/study-finds-extra-pain-relief-is-offered-by-marijuana-flowers-than-cannabis-products/>), Culture Magazine (<https://culturemagazine.com/study-confirms-cannabis-flower-effective-for-pain-relief/>), Times of CBD (<https://timesofcbd.com/latest-university-of-new-mexico-study-shows-marijuana-for-pain-relief-support/>), All CBD Vape (<https://allcbdvape.com/2019/08/26/entire-hashish-flower-relieves-ache-extra-than-different-weed-merchandise-examine-reveals/>), Spirituality and Health (<https://spiritualityhealth.com/blogs/science-spirit/2019/08/26/science-spirit-acupressure-cannabis-and-gulp-scorpions-for-pain-relief>), Pain News Network (<https://www.painnewsnetwork.org/stories/2019/8/27/study-cannabis-flowers-rich-in-thc-more-effective-for-pain-relief>), Marijuana Today Daily (<http://mjtodaydaily.com/>), Medical Daily (<https://www.medicaldaily.com/highly-potent-marijuana-products-are-getting-more-attention-us-teens-441622>), Cannabis Report (<https://cannabisreportworld.com/study-confirms-cannabis-flower-is-an-effective-mid-level-analgesic-medication-for-pain-treatment/>), Weed Maps (<https://news.weedmaps.com/2019/08/flower-power-study-finds-smoking-marijuana-best-for-relieving-pain/>), The Leaf Online (<http://theleafonline.com/c/lifestyle/2019/08/unm-cannabis-study-2019/>), Medical Brief (<https://www.medicalbrief.co.za/archives/cannabis-flower-may-effective-mid-level-analgesic/>), Pain Week (<https://www.painweek.org/media/news/cannabis-offers-average-patient-effective-alternative>), Dr. Howard Smith (<http://drhowardsmith.libsyn.com/cannabis-flower-the-most-effective-pain-reliever>), 420 Intel (<https://420intel.com/articles/2019/09/03/latest-university-new-mexico-study-shows-marijuana-pain-relief-support>), Cannabis Now (<https://cannabisnow.com/smoking-a-bowl-of-high-thc-flower-might-be-best-for-combatting-pain/>), Natural Stress Solutions (<https://naturalstressolutions.com/cbd-and-dreams/>), The Grass Gazette (<https://www.grassgazette.com/2019/08/28/study-finds-smoking-marijuana-best-for-relieving-pain/>), Cannabis Ground (<https://www.cannabisground.com/cannabis-flower/>), Resperate (<https://www.resperate.com/blog/can-cannabis-help-treat-insomnia>), Vapor Vanity (<https://www.vaporvanity.com/science-confirms-cannabis-effective-pain-treatment/>), Cannabis News Box (<https://cannabisnewsbox.com/9032/research/study-demonstrates-pain-relieving-efficacy-of-thc-rich-cannabis-flowers/>), Lab Roots

(<https://www.labroots.com/trending/cannabis-sciences/15611/cannabis-buds-mid-level-pain-relief>), Health Europa (<https://www.healtheuropa.eu/cannabis-flower-thc-relief/93377/>), Daily Iowegian (https://www.dailyiowegian.com/cnhi_network/medical-marijuana-study-users-see--point-drop-on-pain/article_dd89b50d-9397-5429-8c8e-f83c4bafac1c.html), The Daily Item (https://www.dailyitem.com/pennsylvania/news/medical-marijuana-study-users-see--point-drop-on-pain/article_d7a707f4-299f-5a79-9153-e23db1789e99.html), The Tribune Democrat (https://www.tribdem.com/news/medical-marijuana-study-users-see--point-drop-on-pain/article_a4c6ac86-df0f-11e9-89d1-87cc39fb5dd5.html), The Meadville Tribune (https://www.meadvilletribune.com/news/medical-marijuana-study-users-see--point-drop-on-pain/article_985199d7-dd94-51c4-829d-20e6ce586896.html), Cannabis MD (<https://cannabismd.com/news/trending-business/u-s-set-to-spend-millions-on-cbd-research/>), Dispensary Tube (<https://dispensarytube.com/2019/10/21/higher-thc-flower-powerful-for-discomfort-relief-says-study/>), Zanytype (<https://zenytype.com/cbd-can-give-you-weird-dreams-but-even-scientists-dont-have-a-clue-why/>), TNM News Culture (<https://thenationalmarijuananeews.com/marijuana-prevents-people-from-doing-hard-drugs-like-cocaine-and-ecstasy/>), Sleep Review Magazine (<http://www.sleepreviewmag.com/2019/11/cannabis-readily-available-otc-sleep-aid-sales-decline/>), The London Free Press (<https://lfpres.com/cannabis-health/researchers-warn-medical-community-not-to-sleep-on-cannabiss-ability-to-treat-insomnia/wcm/e8003102-677b-4d7f-b31c-1b93e558189f>), Merry Jane (<https://merryjane.com/news/access-to-legal-cannabis-leads-to-a-decline-in-sleep-aid-sales>), The Complementary Medical Association (<https://www.the-cma.org.uk/Articles/Study-Confirms-Cannabis-Flower-Is-an-Effective-MidLevel-Analgesic-Medication-for-Pain-6228/>), News Medical (<https://www.news-medical.net/news/20190821/UNM-researchers-find-strong-evidence-that-cannabis-can-significantly-alleviate-pain.aspx>), 420 Intel (<https://420intel.com/articles/2019/11/21/researchers-warn-medical-community-not-sleep-cannabis%E2%80%99s-ability-treat-insomnia>), Green Camp (<https://greencamp.com/people-prefer-marijuana-for-treating-sleep-disorders-to-standard-meds/>), Times of CBD (<https://timesofcbd.com/new-marijuana-study-recreational-cannabis-use-on-the-rise-for-insomnia/>), Zenytype (<https://zenytype.com/access-to-recreational-cannabis-decreases-demand-for-otc-sleep-aids/>), CBD Reviewed (<https://cbd-reviewed.com/interview-with-jacob-miguel-vigil-phd/>), Lab Manager (<https://www.labmanager.com/news/2019/11/study-finds-recreational-cannabis-widely-used-for-treating-insomnia#.Xi4DICN7IPY>), Every Health Days (<https://everyhealthdays.com/which-has-better-health-effects-on-thc-or-cbd-in-marijuana/>), Marijuana Moment (<https://www.marijuanamoment.net/people-are-skipping-sleep-aids-in-favor-of-marijuana-study-reports/>), Science Blog (<https://scienceblog.com/512119/study-finds-recreational-cannabis-widely-used-for-treating-insomnia/>), Alibi (<https://alibi.com/cannabis/60337/Education-Delivered.html>), Ganja.com (<https://ganja.com/cannabis-flower-is-an-effective-mid-level-analgesic-medication-for-pain/>), The Sleep Doctor (<https://thesleepdoctor.com/2020/02/04/does-cannabis-help-insomnia/>),

Ad Hoc Journal Reviewer

Behavioral and Brain Sciences, Journal of Consulting and Clinical Psychology, Human Reproduction, Psychological Bulletin, Physiology and Behavior, Journal of Affective Disorders, Psychoneuroendocrinology, Journal of Behavioral Medicine, General

Hospital Psychiatry, Current Biology, Evolutionary Psychology, Biological Research for Nursing, Child Maltreatment, Group Processes and Intergroup Relations, Personality and Individual Differences, Behavioral Sciences of Terrorism and Political Aggression, Human Nature, Pain Research and Management, Clinical Journal of Pain, Personality and Individual Differences, Journal of Child and Family Studies, Neuropsychiatric Disease and Treatment, Journal of Political Behavior, Pain, Political Psychology, Social Science Research, American J. Political Science, J. Pain, Cognition and Emotion, Evolutionary Psychological Science, Substance Abuse and Rehabilitation, American Journal of Public Health, Mayo Clinic Proceedings, Annals of Internal Medicine, Complementary Therapies in Medicine, Pain Management, Drug and Alcohol Review, Pharmacological Research, Frontiers in Pharmacology, PLOS Medicine, Advances in Therapy

Ad Hoc Grant Reviewer

Indo-US Science & Technology Forum

Legal Activities

2017 Expert witness (criminal case, State of New Mexico)

Courses Taught

Developmental Psychology, Life-Span Developmental Psychology, Evolutionary Psychology, Social Psychology, Human Sexuality, Advanced Social Psychology, Evolutionary Perspectives on Social Psychology and Health, Emotion and Health, Psychology of Health Promotion Behaviors, Psychological Research Techniques, Cannabis Health Research.

Presentations and Invited Colloquia

Vigil, J. M. (2019, November). Advancements in Medical Cannabis Research at the University of New Mexico. *2019 New Mexico State Bar Foundation: Reefer Madness Part Deux; Chronic Issues in New Mexico Cannabis Law*. Albuquerque, New Mexico.

Vigil, J. M. (2019, October). Cannabis Law and Regulation Update in the Healthcare setting. *2019 New Mexico State Bar Foundation: Primers, Updates, and Practical Advice in the Current Health Law Environment*. Albuquerque, New Mexico.

Vigil, J. M. (2019, September). Medical Cannabis Research at the University of New Mexico. *2019 Clinical Symposium on Medical Cannabis: The Science and Practice Symposium*. Albuquerque, New Mexico.

Vigil, J. M. (2018, May). Associations between Medical Cannabis and Prescription Opioid use in Chronic Pain Patients. *12th National Clinical Conference on Cannabis Therapeutics*. Jersey City, New Jersey.

Vigil, J. M. (2018, May). Effect of Enrollment in a Medical Cannabis Program on Prescription Medication Use. *Cannabis Learn Conference and Expo.*, Pittsburg, Pennsylvania

- Vigil, J. M. (2018, April). Effect of Enrollment in the New Mexico Department of Health Medical Cannabis Program on Prescription Opioid Use in Chronic Pain Patients. *New Mexico Screening, Brief Intervention and Referral to Treatment Quarterly Meeting*. Santa Fe, New Mexico.
- Strenth, C. S., Kruger, E., Vigil, J. M., Thompson, M. E., Kunkel, S. J. & Reeves, A. (2017, November). Establishing time course of testosterone using saliva after a sublingual administration of testosterone: A pilot study. Poster presented at the annual *Shared Knowledge Conference*, Albuquerque, NM.
- Vigil, J. M. & Stith S. S. (August, 2017). Effect of enrollment in the New Mexico Medical Cannabis Program on prescription opioid use in chronic pain patients. *National Cannabis Summit*. Denver, Colorado.
- Vigil, J. M. (April, 2017). Medical Cannabis Program Enrollment and Prescription Opioid Use Among Patients with Chronic Pain, *New Mexico Statewide Epidemiological and Outcomes Workgroup*, Santa Fe, New Mexico.
- Strenth, C. R., Vigil, J. M., Kruger, E., Thompson, M. E., & Reeves, A. (May, 2017). Establishing Time Course of Testosterone Using Saliva After a Sublingual Administration: A Pilot Study. A talk presented at the pre-conference of the 29th annual meeting of the *Human Behavior and Evolution Society*, Boise, ID.
- Vigil, J. (2014). The social functions of fluctuating pain sensitivity across the menstrual cycle. 26th Annual Human Behavior and Evolution Society Conference. Natal, Brazil.
- Vigil, J. (2012). Biopsychosocial Development of Pain in Early Life, 14th Annual Pain in Child Health Institute, Whistler, British Columbia.
- Vigil, J. (2011). Determinants of Psychiatric Disorders, Hanse-Wissenschaftskolleg workshop, Delmenhorst, Germany
- Leedy, A., Liverano, D., Graffam, S., Mcallister, A., Brophy, S., & Vigil, J. (2009). Political orientation varies with facial expression processing and psychosocial functioning. Scholars Transforming Academic Research Symposium, Jacksonville, FL
- Liverano, D., Leedy, A., Graffam, S., Mcallister, A., Brophy, S., & Vigil, J. (2009). Sex differences in social styles and the ability to empathize with desired social responses of other people: A Socio-Relational Evolutionary Explanation. Scholars Transforming Academic Research Symposium, Jacksonville, FL
- McAllister, A., Liverano, D., Leedy, A., & Vigil, J. (2009). Perceptual and Expressive Correlates of Interpersonal Victimization Experiences: Implications for the Processing of Trust in Other People. Scholars Transforming Academic Research Symposium, Jacksonville, FL
- Byrd-Craven, J., Geary, D. C., Hoard, M. K., Numtee, C., & Vigil, J. M. (2003). Evolution

and Development of Boys Social Behavior. Human Behavior and Evolution Society Annual Colloquium, Lincoln, NB

Vigil, J. M. (2000). Attitudes toward twelve-step programs in dually diagnosed. Career Opportunities in Research Education & Training Colloquium, Albuquerque, NM.

Vigil, J. M. (1999). Self-medication beliefs in the severely mentally ill. Career Opportunities in Research Education & Training Colloquium, Washington, D.C.