

Chiropractic Research Earns INTERNATIONAL PRESTIGE

By Jay M. Holder, DC, DACACD, DAAPM



Study relates association between chiropractic care and state of well-being

Results of a major chiropractic research study have been published, which show the remarkable effectiveness of subluxation-based chiropractic adjustments in patients suffering from addictions. The study appeared in *Molecular Psychiatry*, published by Nature, and is rated second in psychiatry and tenth in neurosciences out of hundreds of leading peer-reviewed medical research journals throughout the world. Primary author and lead researcher, Jay M. Holder, DC, is the founder and Medical Director of Exodus Addiction Treatment Center, founder of the American College of Addictionology and Compulsive Disorders, and inventor of Torque Release Technique and the Integrator adjusting instrument both used in the research study.

This is the first time chiropractic research has been published in a journal of such international importance and prestige in the world scientific community. Nature Publishing Group's flagship journal, *Nature*, is the highest-rated peer-reviewed scientific journal in the world.

The purpose of the study was to determine if subluxation correction would allow for greater fulfilment of human potential in the arena of "state of well-being," a fundamental principle within chiropractic philosophy. However, until now, no randomized placebo controlled studies had been conducted that put chiropractic's philosophy to the test, only studies that provided outcomes in the treatment of specific conditions or symptoms had been done (mainly limited to musculoskeletal intervention).

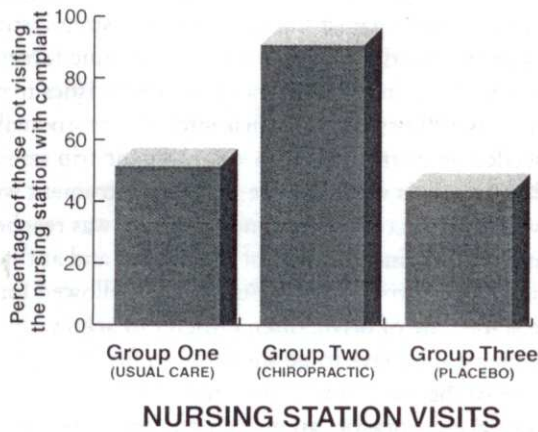
I authored another study which was published last November, in the *Journal of Psychoactive Drugs*; along with eight other internationally renowned scientists in human genetics and brain research, we established the first scientific model of the subluxation to withstand scientific scrutiny. Titled "Reward Deficiency Syndrome: A Biogenetic Model," the journal contains over 400 peer-reviewed

references and is 112 pages, making it one of the largest journal articles to be published in a mainstream scientific journal. The concept of the Brain Reward Cascade and expression of human potential is one of the hallmarks cited in support of subluxation correction.

The *Molecular Psychiatry* study was funded in part by the Florida Chiropractic Society and the design for the study was performed by Robert Duncan, PhD, University of Miami School of Medicine, biostatistician and Professor of Epidemiology.

I chose addicts for the study population since addicts best represent those persons suffering from Reward Deficiency Syndrome (a lack of state of well-being) and its relationship to the Brain Reward Cascade. Therefore, the study was conducted at Exodus Addiction Treatment Center, a 350-bed Addiction hospital located in Miami, Florida. During the 18-month study, the patient population was divided into three test groups. Group One received standard addiction treatment including group therapy, psychotherapy and medical care. Group two received the same addiction treatment but was also provided subluxation-based chiropractic adjustments using the Torque Release Technique delivered >>

via the use of the Integrator adjusting instrument. Group Three was the placebo group which received the same addiction treatment performed in Group One and two, but was also provided placebo chiropractic adjustments by modifying the Integrator to fire without any force or frequency characteristics.

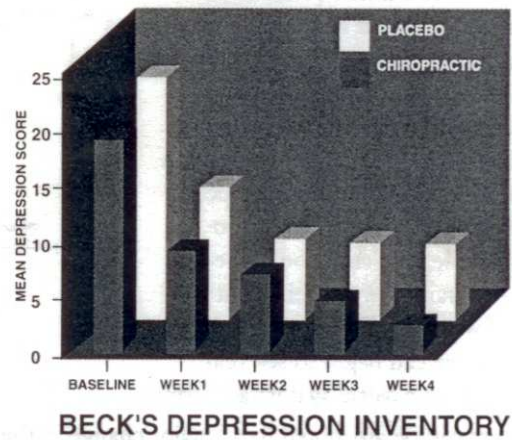


Just 56 per cent of Group One finished their treatment program, compared with 75 per cent of Group Three (placebo group), but this was not statistically significant thereby failing to support that chiropractic had a placebo effect. However, 100 per cent of the patients in Group two receiving true chiropractic adjustments finished their treatment program. This 100 per cent Retention Rate has never been accomplished by any other modality including pharmaceutical, psychological or medical treatment. Retention Rate is the "gold standard" in the field of addiction treatment. It is the primary yardstick for funding treatment programs that government funding agencies and drug courts use to fund and/or refer patients to. There are now over 400 drug courts requiring treatment instead of incarceration throughout the United States. The Miami Drug Court was the first.

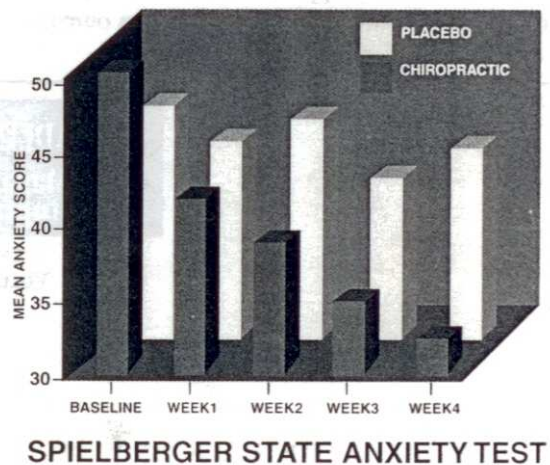
In addition, Group two also made far fewer visits to the nurse's station and showed statistically significant decreases in anxiety, a leading cause of relapse to addicts. Only nine per cent of those receiving adjustments by Torque Release Technique made one or more visits to the nurse's station while in the program, compared to 56 per cent of the placebo group and 48 per cent of the usual care group. This suggests that the chiropractic adjustments not only lacked a placebo effect, but that the placebo group did the worst. This was quite important since our detractors like to blame chiropractic's success on some sort of placebo effect; they certainly can't in this case.

The Beck's Depression Inventory revealed that chiropractic care got depression levels below a score of 5 in 4 weeks, something which usually took one year of medication and psychotherapy to achieve the

same result. The Spielberger State Anxiety Test revealed that chiropractic care got anxiety levels below a score of 35 in 3 weeks. Normally it took six months of medication and psychotherapy to achieve the same result.

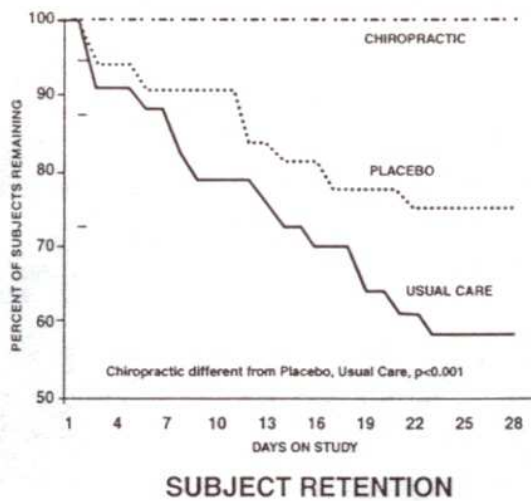


The study clearly showed a strong association between chiropractic care and significant improvement in state of well-being and increased retention of patients in an addiction treatment program. Currently, retention is a major hurdle in treating addictions. There are five addictions: chemical, work, eating disorders, sex and gambling. This includes but is not limited to the compulsive disorders such as ADHD, Tourette's Syndrome, depression and anxiety disorders. Anecdotal Torque Release Technique research has revealed restoration of abnormal EEG brain wave activity in ADHD following subluxation correction. By error of omission, the leading cause of death in North America is drug-related and is the leading cause of crime at 84 per cent. Interestingly, there are three causes of subluxation: mental, chemical, physical.



Addicts who finish a 30-day program have a much better chance of overcoming their addiction and staying clean. However, nationally, only 72 per cent of all participants manage to complete such a program. That's why the 100 per cent retention >>

rate offered by subluxation correction in this study is so important. Too many people who could be helped by these programs are dropping out too soon. If we can get them to stay in the program, we can begin to see real progress in our battle against addictions.



Success can be attributed to a "major change in the anxiety levels, which went down much more dramatically in the chiropractic group.

"In these kinds of treatment facilities, if you make an effort that's successful to reduce anxiety, you can keep people around longer," my colleague Dr. Robert Duncan added.

The Torque Release Technique and the Integrator were created out of this study by accident. In designing the study I had to find a way to ensure consistency and reproducibility in the application of delivering the chiropractic adjustment and to measure its outcome.

To accomplish this it was necessary to adjust by instrument rather than by hand. However, chiropractic had not yet developed an instrument that reproduced what the chiropractor's hands were intended to do; and the most classical thrust maneuver by hand was Toggle Recoil. Further, other adjustment instruments tested were not found to be reproducible since they are held by hand against the patient's skin and fired by hand.

According to the Holder Research Institute and studies published by others, if the pressure of the patient's skin against the tip of any adjusting instrument varies even a fraction of an ounce, the dynamic forces, frequency (Hz), and kinetic energy characteristics may vary as much as 300 per cent. To guarantee this reproducibility, we needed an instrument with an automatic trip sensor mechanism. This would assure that the instrument would fire when an exact predetermined pressure was reached when placed against the skin of the patient and at the specific line of drive desired. Further, this allowed

for a more stable line of drive, often difficult to achieve in instruments that have to be squeezed to fire. Since the purpose of the study was to determine the outcome of traditional chiropractic, an instrument had to be developed that delivered what the hands were intended to. All existing adjusting instruments provide only axial (straight line) force. However, the hands provide, at the option of the chiropractor, three additional concomitant dimensions: speed, recoil and torque (right or left), as in the most traditional application of the adjustment, toggle recoil. Torque allows for a line of drive that remains more stable with deeper penetration and recoil allows for greater thrust outcome with less force. The torque corrects the superior or inferior listing of the subluxation, with the axial correcting the lateral and or posterior rotation listing of the subluxation. That's what the Integrator can now perform, and at a speed of 1/10,000 of a second, along with recoil and a trip tip.

The Integrator became the first chiropractic device to apply to the FDA. In 1995, a 510K medical device designation was granted by the FDA, which specified that the Integrator was found safe and effective for the correction of vertebral subluxation. This historic action meant that now a second federal agency had acknowledged the subluxation / chiropractic.

International wire services picked up the news of the Chiropractic study published in *Molecular Psychiatry*, with hundreds of newspapers carrying the story throughout the U.S. and Canada, including the *Toronto Star*. In addition, I have been interviewed by *USA Today* and several national television news services. When speaking with reporters, however, I was careful to emphasize the true nature of chiropractic as a means of correcting vertebral subluxations. Chiropractic does not treat addiction - it does not treat any disease. We're allowing those things that treat addiction to be embraced more thoroughly by correcting subluxations. This is the first research study to establish that subluxation correction improves state of well-being and allows for greater expression of human potential.

Future use of chiropractic to improve outcomes for the five addictions and other compulsive disorders, promises to open new opportunities to DCs in addiction programs, drug courts, community-based programs, prisons, hospital programs and the private practice. Currently there are 18,000 addiction treatment programs in the U.S. More than 50 million people are affected by addictive and compulsive disorders and the need for subluxation correction exists in all treatment programs. Last year, the United States spent over 300 billion dollars on treating the addiction epidemic, which is officially classified as a disease.

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This year, the American College of Addictionology and Compulsive Disorders entered its 10th year of offering a Board Certification program in addictions and compulsive disorders to chiropractors and other health care professionals. The program leads to a C.Ad. (Certified Addictionologist) credential. For more information visit: www.acacd.com or www.torquerelease.com . •

REFERENCES

- Holder, Jay; Duncan, Robert; Gissen, Matthew; Miller, Michael; Blum, Ken; "Increasing retention rates among the chemically dependent in resident treatment: subluxation based chiropractic care." *Molecular Psychiatry*, vol 6 supplement Feb 2001, Nature Publishing Groups, England.
- Blum, Ken; Braverman, Eric; Holder, Jay; Lubar, Joel; Monastra, Vincent; Miller, David; Lubar, Judith; Chen, Thomas; Cummings, David. "Reward Deficiency Syndrome: a Biogenetic Model for the Diagnosis and Treatment of Impulsive, Addictive and Compulsive Disorders." *Journal of Psychoactive Drugs*, Vol 32 Supplement Nov 2000.
- Holder, Jay. "New Technique Introduced: EEG Confirms Results", *ICAC Journal*, May 1996.
- Nadler, A; Holder. J; Talsky, M; "Torque Release Technique: A Technique Model for Chiropractic's Second Century." *Canadian Chiropractor*, Vol. 3, N°1, Feb. 1998.
- Palmer DD. *The Chiropractor's Adjuster*. Portland: Portland Printing Co, 1910: 1.
- Palmer DD. *The Chiropractor*. Los Angeles: Beacon Light Printing, 1914: 8, 17-8.
- Kent C. *Models of Vertebral Subluxation: A Review*. *J Vert. Sublux. Res.* 1996; 1(1): 11-17.
- Holder JM; Talsky MA. *Challenging Chiropractic Concepts*. On Purpose series, Paradigm Partners, January 1998.
- Holder JM. *Torque Release Technique: A Subluxation-based system for a new scientific model*. *Today's Chiropractic*, March/April 1995: 62-6.
- Stephenson RW. *Chiropractic Text Book*. Davenport: Palmer School of Chiropractic 1917: 305-7.
- Breig A. *Adverse Mechanical Tension in the Central Nervous System*. New York: John Wiley & Sons, 1978.
- Pert C; Dienstrey H. *Neuropeptide network*. *Annals of the New York Academy Sciences*, 1988; 521: 189-94.
- Herkenham M; Pert CB. *Light microscopic localisation of brain opiate receptors: a general autoradiographic method which preserves tissue quality*. *J Neuroscience* 1979; 2: 1129-49.
- Burstein R; Potrebic S. *Retrograde labeling of neurons in the spinal cord that project directly to the amygdala or the orbital cortex in the rat*. *J Comparative Neurology*, 1993; 335: 469-85.

Giesler GJ; Katter JT; Dabo RJ. *Direct spinal pathways to the limbic system for nociceptive information*. *Trends in Neuroscience*, 1994; 17: 244-50.

Spielberger State Anxiety Test.

Beck's Depression Inventory.

Blum K; Holder JM. *The Reward Deficiency Syndrome: a Biogenic Model*, Amereon House, Mattituck, NY, 1997.

Holder JM; Blum K. *Attention Deficit Disorder (ADD): Biogenic aspects*. *Chiropractic Pediatrics*, 1994; 1 (2): 21-24.

Palmer BJ. *The Subluxation Specific - The Adjustment Specific*. Palmer School of Chiropractic, Davenport 1934: 15.

Stephenson RW. *The Art of Chiropractic*. Palmer School of Chiropractic, Davenport 1927, Reprinted 1995: 8-9,15,20,82-83.

Keller TS. *Engineering - In vivo transient vibration analysis of the normal human spine*, in: *Activator Methods Chiropractic Technique*, Mosby, 1997: 431-50.

Holder JM. *Tone Vitalism and Subluxation Research*. On Purpose series. Paradigm Partners; Jan 1997.

Achterberg J; Lawlis GF. *Bridges of the Bodymind*. Inst. Personality and Ability Testing, Champaign, Ill, 1980.

Dr. Holder is the first American physician to receive the Albert Schweitzer Prize in Medicine from the Albert Schweitzer Gesellschaft, Vienna, Austria; 1992 FCA Chiropractor of the Year; FCS Chiropractic Researcher of the Year 1995. Dr. Holder is Adjunct Professor at St. Martin's College, Milwaukee, Wisconsin; Treasurer/Board of Directors, Council on Chiropractic Practice; and held appointment to the faculty at the University of Miami, Center for Addiction Studies and Education. Author of several texts and many scientific papers, Dr. Holder is in his 27th year of private practice in Miami Beach, Florida.

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