

Vertebral Subluxation-Centered Straight Chiropractic Research

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Straight chiropractic has been considered by some an anti-scientific approach to health care, because of statements made both by its proponents and its detractors(1). Indeed, certain tenets of straight chiropractic, particularly its reliance on an innate, immaterial organizing principle, may not be testable with the scientific method, but must be taken on faith or by assumption. Still, the claim that detection and removal of vertebral subluxation can be of benefit to humans, regardless of the mechanism of that effect, should be testable in an objective manner.

In this article I will offer a definition of straight chiropractic and show how adherence to its principles, rather than limiting scientific investigation, creates opportunities for a wide variety of research.

Straight Chiropractic

There are really two distinct versions of straight chiropractic, the traditional and the more recent “Objective” straight, with important differences for this discussion. They both take the stance that life is inherently driven toward continuing organization and improvement and that the correction of vertebral subluxation is the major objective of chiropractic care. However, the perceived need for vertebral subluxation correction seems different between the two groups. Traditional straight chiropractic views the vertebral subluxation as the cause of all dis-ease, and its correction as a form of health care. The view could be expressed as, “If you are sick, you are also subluxated, and correction will bring relief.”

“Objective” straight chiropractors, as taught at Sherman College (2) and whose principle spokesmen are Reggie Gold and Joe Strauss, have advanced beyond using chiropractic adjustment only to heal the sick. First, in this view, vertebral subluxation is a deterrent to proper functioning regardless of whether you are sick, i.e. exhibiting symptoms of illness, or not. Secondly, it is recognized that a host of factors can contribute to illness, including poor nutrition, lack of clean drinking water, or air pollution. Objective straight chiropractors do not see their role as the identification of the cause of illness, but rather the more focused detection and correction

of vertebral subluxation. Hence, this view might be expressed as “If you are alive, you should be checked for vertebral subluxation.”

Perhaps you can already see where the objective straight approach can open opportunities for research. Treatment-based research is aimed at showing the benefits of chiropractic care for particular conditions. However, the more specific and well defined the condition under investigation, the more difficult it becomes to enroll enough patients to complete a study. If the investigators are soliciting patients using newspaper or radio advertisement, the costs of the study can be well beyond all but the best funded research programs. More prevalent conditions such as low back pain will be studied more easily. In much the same way that an objective straight chiropractor would consider anyone a potential patient, sick or not, straight research is open to the assessment of vertebral subluxation’s effect on any kind of physical or mental performance in any person. Hence, a large population of subjects is more easy to enroll for a straight research project.

The basic straight chiropractic tenet that needs to be tested is that a person who is free from vertebral subluxation will have optimal adaptive ability, and their physiology should show appropriate change to meet the demands of the environment. A corollary to this tenet is that while a vertebral subluxation-free individual may exhibit physiological behavior that would be considered symptomatic of some disease, the behavior could be a normal process, deemed by the innate organizing control system as a necessary reaction to the individual’s unique circumstances. Hopefully, specific testable hypotheses can be derived from this tenet and its corollaries. The whole approach hinges on researchers’ ability to operationally define and reliably detect the vertebral subluxation under study.

Vertebral subluxation definitions

Most definitions of vertebral subluxation are too vague for use in research. Indeed, the most popular definitions seem to be structured to encompass any type of nerve system disturbance and any type of joint derangement. For research, what is needed is an operational definition: the particular variables to be measured, along with methods and values that will indicate the presence of vertebral subluxation.

Operational definitions need not be all encompassing — they are tools of research, not of politics — and are often bound tightly to adjustive techniques. An operational definition that is probably well recognized by many readers of CRJ is that used in the Grostic Procedure and other techniques derived from it. In brief, the vertebral subluxation is recognized to exist in the upper cervical area, either between the occiput and atlas, or atlas and lower cervical spine. The vertebral subluxation has a misalignment component that is measured with a very specific and repeatable x-ray analysis, and a neurological component that is detected as an imbalance in

supine leg length, palpable tenderness in the suboccipital muscles, and asymmetric skin temperature in the paraspinal area. The precise methods for doing these tests are taught in some college programs as well as weekend post-graduate technique seminars.

Much of the developmental work for operational definitions has already been done by technique developers. In fact, to make research more generalizable and applicable to chiropractic as it is practiced in the field, it would be a good idea to use a popular technique-dependent operational definition in research. The challenge lies in the validation of the model and methods.

Validity of measures

Reliability testing is an important part of validation of methods, because it shows that a measure is at least objective. Repeatability tests are fairly easy to perform and have been used to show that certain misalignment and neurological checks can be performed in an objective manner, particularly x-ray analysis (3) and leg length inequality (4).

Repeatability alone, however, does not indicate validity because it does not test accuracy or clinical meaningfulness. Many researchers consider the validation of vertebral subluxation measures an impossible task, because validation usually means comparing a measure to a known gold standard assessment, and no such gold standard exists in chiropractic.

The bi-dimensional nature of the vertebral subluxation, its combination of articular derangement and neurological dysfunction that calls for a battery of assessments, may be the key to demonstrating its existence and validity. Measures of misalignment and neurological dysfunction are very different phenomena and would not be expected to change in unison unless there were some underlying causative relationship. Hence, demonstration that two or more reliable measures co-vary, a measure of concurrent validity, should be enough to validate systems of vertebral subluxation detection. Further validation can come from clinical results, where vertebral subluxation correction is associated with improved performance or enhanced well-being.

Impact on experimental design

Changing the focus of chiropractic research from disease treatment to testing the effects of vertebral subluxation correction on health and well-being has an interesting 'side effect' on the methodology that can be used. The classic randomized controlled trial, when applied in a chiropractic setting, is difficult to accomplish, particularly because a convincing sham adjustment is hard to come by, and also misses the point of the intervention. The adjustment is not used as a treatment for a condition, but as a corrective procedure to remove vertebral subluxation.

The real hypothesis is not whether the delivery of adjustment is related to changes in performance, but rather, whether the correction of vertebral subluxation has the intended effect. Hence, it is more important to use vertebral subluxation measures to ascertain the adjustment's effectiveness in removing vertebral subluxation. Indeed, it is possible for a control (nonadjusted)

subject in a double blind controlled study to be free of vertebral subluxation, just as it is likely that an adjusted subject would not be completely freed of vertebral subluxation at every visit.

It would be more interesting, from the perspective of vertebral subluxation-centered research, to assess the length of time each patient spent in the subluxation-free state during the study period. The hypothesis to be tested would then be that increases in performance are proportional to the length of time the patient was free of vertebral subluxation. This method might make the use of control groups unnecessary in clinical research, counting on differences in the effectiveness of the adjustment and the extent to which subjects respond to them to provide variable amounts of change in vertebral subluxation factors.

Conclusion

Chiropractic research centered on the vertebral subluxation is sorely needed to help push the profession beyond disease care, toward enhancement of human performance and well-being. The vitalistic philosophic tenets of chiropractic indicate that the real wealth of the chiropractic adjustment lies there, and the experience of straight chiropractors lends credence to the idea. Still, research endeavors should be addressed to enhance our ability to recognize and monitor the existence of vertebral subluxation with reliable and valid methods. Choosing to work in this domain offers distinct advantages to research, particularly in the less stringent inclusion criteria for patients, and in more humane and simpler research designs that test the effects of vertebral subluxation correction on human performance and well-being.

References

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